

I begin in the name of Allah (God) the most Gracious the most Merciful.  
Thanks be only to Allah the glorified and salaam be (peace and  
blessings) on his prophet Mohammed.

***The Opening from the All Knower, The  
Generous: a comparative study between  
Bacteria and Jinn***

3<sup>rd</sup> edition

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(P.S All the true information is from Allah and what is wrong is from  
myself and satan)

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## **Foreword:**

This paper is a review article to help clarify about the reality and features of Jinn (satan or devil). It is also a review of bacteria and all other microbes by unveiling few features that have not become so popular among most people in the world. Furthermore, it is written in a mixed style, incorporating both academic and non-academic form of writing. Also, in referencing the writer has followed the Arabic non-academic form of referencing as it is the easiest one to be followed for non-specialized people.

This paper is also meant to be a gift for every true Muslim who tries to support his or her religion (Quran and Sunnah) even by a word.

I ask my Lord to make it an alleviation of the oppressions on all Muslims. Also, I ask my Lord to make it a light with which Allah enlightens the heart of many people and take them out of darkness to the straight path.

## **Introduction:**

All Praise is due to Allah the Lord of All beings and Lord of all the Worlds. Then Peace and blessings be upon the best of the creatures and the Last messenger Mohammed.

This comparative study is meant to be a review article and a comparison at the same time.

Since the seventeenth century bacteria have been accepted in the scientific field to be single celled beings and are living in a unicellular form (in a single celled form). Absolutely contrary to the actual scientific fact, this is not true in most cases. Now, it has been widespread that bacteria most commonly live in communities consisting from multiple species. Along with those also viruses and fungi might live. Although this review article was meant to refute darwin's theory, but proving that Islam was pioneer in stating very delicately accurate scientific facts would have the same impact by the will of Allah. Therefore, this review will not be about darwin's theory.

Therefore, in this article a review of jinn(devil or satan) will be done *based up on the writer's understanding* from the evidences in Islam. Concomitantly alongside this, correction of some beliefs on bacteria will be presented. At the conclusion, the comparison is being discussed and critiqued. Moreover, few topics will be suggested to be researched to prove what the author has stated.

### ***Special Thanks:***

Endless thanks To My Lord (Allah the Almighty) who guided me from the darkness to the light and permitted me to finish this article. Then my special thanks and gratitude to my mother, my father, my sister, my brother, my wife, brothers in islam and everyone I love for the sake of Allah the Almighty. Finally, thanks to anyone who had a hand in my review even if passive especially those in Islamport website, Islamweb website, Dorar website, Sahih albukhari website, sahih muslim website, Sunnah website and all the others that I have benefited from directly and indirectly.

## **1. Chapter one:**

### **Definitions and some information about Jinn**

#### **1.1 The Difference between Jinn, devil and iblis (satan)**

Ibn abdill barr says: “Jinni is known amongst the linguists to divide into groups: so if they mean jinn they are mentioned solely. If they mean those which live with humans inside their houses they are called house settlers. If it becomes stronger it is called a satan, then if it becomes much stronger it is called a demon”<sup>1</sup>.

Shaikh Abdull kareem Obaidat said: “Therefore the best definition for Jinn would be that they are a kind of living creatures that have free will and cannot be seen neither felt by our sensory organs and have the ability to eat, drink and multiply sexually”.

He continues “Also, their nature is different from those of humans as they originate from different materials. Our Lord the superior says: He created man (Adam) from sounding clay like the clay of pottery. (14) And the jinn He created from a smokeless flame of fire. (Surat Arrahman 55, verse 14-15). Therefore, their origin is from fire, while that of the human is from clay”.<sup>2</sup>

#### **1.2. Are Jinn the same kind as Angels?**

Shaikh Obaidat says: "Well, there is a disagreement among scholars of Islam whether iblis (which is the father of Jinn) is another kind of Angel or is a different kind of creature. This disagreement stems from the misinterpretation of few Quranic verses, like the one in which Allah the

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<sup>1</sup> The world of Jinn and Satans, Omar sulaiman al ashqar, page 12.

<sup>2</sup> The world of Jinn in the light of Quran and Sunnah, Abdulkarim obaidat, page 8.

superior Says: And remember when We (Allah) said to the angels: "Prostrate yourselves before Adam. And they prostrated except iblîs (satan), he refused and was proud and was one of the disbelievers. (chapter Al Baqarra ( 2), verse 34)"<sup>3</sup>

Shaikh Obaidat also says "Other Scholars argue that iblis is from Jinn which are completely different from Angels. This opinion stems from the linguistic point of interpretation of the Verses which may mean that iblis is not from Angels. However the most probable opinion is that he is a Jinni based upon the Quranic verses. Allah the Superior Says: And (remember) when We (Allah) said to the angels; "Prostrate yourselves unto Adam." So they prostrated themselves except iblîs (satan). He was one of the jinn; he disobeyed the Command of his Lord. (Surah Al kahf 18, verse 50). This Verse settles the argument as it clearly states that iblis (satan) which is the father of Jinn is different from Angels and is from the Class of Jinn".<sup>4</sup>

### **1.3. Can jinn affect the human body with harm? If yes: How?**

There is a disagreement among the Islamic scholars on the issue that Jinn can harm the Human body. This disagreement originates from the difference in the explanation (interpretation) of this Verse:

Allah (the only deity worthy of being worshipped in Arabic or the God) the Just says: And remember Our slave Job, when he invoked his Lord saying: "Verily! satan has touched me with distress (by ruining my health) and torment (by ruining my wealth). (Quran :Surah Saad 38: Verse 41).

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<sup>3</sup> The world of Jinn in the light of Quran and Sunnah, Abdulkarim obaidat, page 475.

<sup>4</sup> The world of Jinn in the light of Quran and Sunnah, Abdulkarim obaidat, page 486.

**1.3.1. The First opinion** is that satan has affected Job (peace on him) by whispering bad thoughts and Ideas which could have led him to despair his Lord's Mercy.

This is the saying of Alzamakhshary, Abu Hayan, Ibn Ashur and others who are considered to be muslim scholars.

**1.3.2. The second opinion:** is that Satan has truly affected Job's body (peace on him), harmed him and made him ill.

This is the saying of Al Qurtubi, Ibn Katheer, Ibn Aljawzi, Albaghawwy, Alshawkany and Alshinqiti (may Allah have mercy on them All).

The evidences of these different perspectives are discussed in the next Section.

### **1.3.3. The True opinion about the damage that jinn can afflict on the Human body**

Truly jinn can distress humans by causing different kinds of bodily damages to mankind's corpuses.

*Islamic scholars' sayings are as follows:*

Ibnu Taymya (may Allah's mercy be on him) says: " If satan would present and appear to Prophets and messengers to harm them and disrupt their worship, and Allah keeps them away from the prophets with what he reveals to the prophets to assist them. So what would be for those who are lesser than prophets? "<sup>5</sup>

Alshinqiti (may Allah have mercy on him) also says: Allah states that He has tested his servant and His prophet Job (peace be on him) in his body, his wealth and his family. Also, that Job (peace be on him) invoked to His

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<sup>5</sup> Qaaidatun jaleela in tawasoul and waseela, vol 1 page 43.

lord and that Allah has answered him. Moreover He gave him back his health and family and removed his disease. Job (peace be on him) relates all those afflictions to satan. satan might had the power on Job's body (peace be on him) as Allah might allowed him to do so, to trial him as to display his great patience.<sup>6</sup>

#### **1.3.4. The evidences that Jinn can harm man's body:**

##### **1. Abu Darda' reported:**

Allah's Messenger (ﷺ) stood up (to pray) and we heard him say: "I seek refuge in Allah from thee." Then said: "curse thee with Allah's curse" three times, then he stretched out his hand as though he was taking hold of something. When he finished the prayer, we said: Messenger of Allah, we heard you say something during the prayer which we have not heard you say before, and we saw you stretch out your hand. He replied: Allah's enemy iblis came with a flame of fire to put it in my face, so I said three times: "I Seek refuge in Allah from thee." Then I said three times: "I curse thee with Allah's full curse." But he did not retreat (on any one of these) three occasions. Thereafter I meant to seize him. I swear by Allah that I had it not been for the supplication of my brother Sulaiman he would have been bound, and made an object of sport for the children of Medina.<sup>7</sup>

There is another narration of the same saying in Sahih Al Bukhari which means that the jinn came to the prophet (ﷺ) to interrupt his prayer.

This saying is a clear proof that jinn cause bodily harms to the prophets.

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<sup>6</sup> Adhwaaa alabayan, Vol 4 page 239-240

<sup>7</sup> Sahih muslim vol 5, hadith 51. <http://sunnah.com/muslim/5/51>



## **2. Narrated Jabir bin `Abdullah:**

Allah's Messenger (ﷺ) said, "When night falls (or when it is evening), stop your children from going out, for the devils spread out at that time. But when an hour of the night has passed, release them and close the doors and mention Allah's Name, for satan does not open a closed door. Tie the mouth of your waterskins and mention Allah's Name; cover your containers and utensils and mention Allah's Name. Cover them even by placing something across it, and extinguish your lamps<sup>8</sup>. "

Ibn Batal narrated a saying of Almuhalab in the explanation of this prophetic saying: the prophet forbade us to set the children free after sunset as if the jinn are out then they might hurt our children and cause epilepsy.<sup>9</sup>

## **3. Abu As-Sa'ib, the freed slaved of Hisham b. Zuhra, said that he visited Abu Sa'id Khudri in his house (and he further) said:**

"I found him saying his prayer, so I sat down waiting for him to finish his prayer when I heard a stir in the bundles (of wood) lying in a corner of the house. I looked towards it and found a snake. I jumped up in order to kill it, but he (Abu Sa'id Khudri) made a gesture that I should sit down. So I sat down and as he finished (the prayer) he pointed to a room in the house and said: Do you see this room? I said: Yes. He said: There was a

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<sup>8</sup> Sahih al bukhari, book 74, hadith 49. <http://sunnah.com/bukhari/74/49>

<sup>9</sup> the explanation of Sahihul Bukhari of Ibn Batal, Vol 6, page 77.

young man amongst us who had been newly wedded. We went with Allah's Messenger (ﷺ) (to participate in the Battle) of Trench when the young man in the midday used to seek permission from Allah's Messenger (ﷺ) to return to his family. One day he sought permission from him and Allah's Messenger (ﷺ) (after granting him the permission) said to him: Carry your weapons with you for I fear the tribe of Quraiza (may harm you). The man carried the weapons and then went back and found his wife standing between the two doors. He bent towards her smitten by jealousy and made a dash towards her with a spear in order to stab her. She said: Keep your spear away and enter the house until you see that which has made me come out. He entered and found a big snake coiled on the bedding. He darted with the spear and pierced it and then went out having fixed it in the house, but the snake quivered and attacked him and no one knew which of them died first, the snake or the young man. We came to Allah's Apostle (ﷺ) and made a mention to him and said: Supplicate to Allah that that (man) may be brought back to life. Thereupon he said: Ask forgiveness for your companion and then said: There are in Medina jinn who have accepted Islam, so when you see any one of them, pronounce a warning to it for three days, and if they appear before you after that, then kill it for that is a devil." <sup>10</sup>

So it is very obvious that the jinn killed the companion of the dear prophet (peace and blessings be on him).

#### **4. Yahya related to me from Malik that Yahya ibn Said said,**

"When the Messenger of Allah, may Allah bless him and grant him peace, was taken on the Night Journey, he saw an evil jinn seeking him with a torch of fire. Whenever the Messenger of Allah, may Allah bless

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<sup>10</sup> Sahih muslim, book 39, hadith 190. <http://sunnah.com/muslim/39/190>

him and grant him peace, turned, he saw him. Jibril (Gabriel the angel) said to him, 'Shall I teach you some words to say? When you say them, his torch will be put out and will fall from him.' The Messenger of Allah, may Allah bless him and grant him peace, said, 'Yes, indeed.' Jibril said, 'Say, 'I seek refuge with the Noble Face of Allah and with the complete words of Allah which neither the good person nor the corrupt can exceed, from the evil of what descends from the sky and the evil of what ascends in it, and from the evil of what is created in the earth and the evil of what comes out of it, and from the trials of the night and day, and from the visitations of the night and day, except for one that knocks with good, O Merciful!'" <sup>11</sup>

This is confirmation that jinn wanted to harm the body of the prophet (peace and blessings be on him).

**5. Allah the Most Merciful says:** And to Solomon (We subjected) the wind, its morning (stride from sunrise till noon) was a month's (journey), and its afternoon (stride from the midday decline of the sun to sunset) was a month's. And We caused a fountain of (molten) brass to flow for him, and there were jinn that worked in front of him, by the Leave of his Lord, And whosoever of them turned aside from Our Command, We shall cause him to taste of the torment of the blazing Fire. (12) They worked for him as he desired, (making) high rooms, images, basins as large as reservoirs, and (cooking) cauldrons fixed (in their places). "Work you, O family of David, with thanks!" But few of My slaves are grateful. (13) (Surah sabba 34, verses 12-13)

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<sup>11</sup> Mutta malik, book 51, hadith 10. <http://sunnah.com/urn/418000>

Allah the superior states that he enslaved the jinn for Solomon (peace be on him) and they built large buildings, statues and basins for him. So if they can build these things for him, then they surely have the ability to move things and afflict harm on mankind (at least physically).

### **1.3.5. The right opinion about satan's power on mankind:**

The whole difference and dispute among the Muslim scholars takes its origin from the difference in understanding this Verse in the Holy Quran:

Allah the Most Great says: "Certainly, you shall have no authority over My slaves, except those who follow you of those who go astray. (Surah Alhijr, verse 42)

As it is clear throughout this paper that Muslim scholars split into two groups in terms of interpreting the authority of satan on the infallible humans; and they are as follow:

1. Those who explain the word of authority or power as the domination of satan on the human's body and mind. Among those are Abu Hayan the one who had written an explanation of the Holy Quran.
2. Those who interpret this word as argument or allegation on human. Among those are Al Qurtubi, Al Tabari, Al Baghawi, Al Shawkani and Al Shanqitii and others.

However, the true opinion is that of the second group. This is evident in the saying of al-Qurtubi in his explanation of the Holy Quran where he explained the above verse:" satan has no power on their heart, neither on their place of faith, nor he can force them to do false action that they would not be forgiven, but this mistake is erased by repentance" <sup>12</sup>.

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<sup>12</sup> Tafseer alQurtubi Arabic version, vol 10, pages 26-27

## **2. Chapter Two:**

### **The diseases evoked by Jinn:**

#### **2.1. Plague:**

In Islam the story of Plague's causative agent is mentioned by our beloved prophet Mohammed (peace and blessings on him):

The plague was mentioned in front of Abu Musa (Allah be pleased with him) then he said we have asked the prophet (peace and blessings be on him) he replied that it is the assault (aching) from your enemies of the jinn which is martyrdom for you.<sup>13</sup>

Also the prophet (peace and blessings be on him) said: the vanishing of my nation is by stabbing and plague which is the aching (assault) from your enemies from the jinn and in each is martyrdom.<sup>14</sup>

Hence in Islam plague is known to be caused by jinn. But in modern science, it is accepted to be as a result of a Microbe popularly known as *Yersinia pestis*. Is this not a clear conflict of the Islamic religion with the up to date scientific facts? Explanations will follow by the will of my Lord Allah.

#### ***2.1.1: The Definition of Plague in Islam and its symptoms:***

Ibn Hajar Al Aasqalany (Allah mercy him and raise his rank) collected the sayings of the Muslim scholars on the Plague and its definition:

"Al khaleel says: plague is an epidemic. The author of Al Nihayaa says that it is the general disease that the air is polluted with and the bodies are destroyed with. Abu bakr bin Alarabi said: it is the dominant disease that

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<sup>13</sup> Musnad Ahmed, hadith no. 25649 and others

<sup>14</sup> Musnad Ahmed, hadith no. 19208 and others

kills the soul with choking, it is called so because of its general and rapid spread. Abu Waleed Albajy said: it is an illness that dominates many people in different places, in contrast to the other sicknesses common in the environment. The illness of those many people is one while in times other than an epidemic their illnesses are dissimilar. Al Dawdy said: it is a node that appears in the armpits and the beginning of the thighs and in every fold of the Body and the right viewpoint is that it is an epidemic. Al Qathy Eiath (judge Eiath) says: the origin of Plague is the ulcer showing on the body, while epidemic is the disease in general; therefore it is called plague because of the similarity between them in destruction. In fact every plague is an epidemic while its contrary is not true. He also said, which indicates that this rule is true: is the epidemic of Levant was plague. Moreover, the prophetic saying proves that it is the aching from the jinn. Ibn Abdul barr said: it is a swelling or a node in the armpits or the inguinal areas. It might be found in the hands and fingers or wherever Allah wants to. Al Nawawi said in the Rawdah: it is the flowing of blood into an organ. Al Mutawali said: It is close to Leprosy whoever is infected with will have his organs worn away and his skin and flesh would fall down. Al Ghazali said: it is the swelling of the whole body due to blood associated with fever and flushing of the organ due to over-flow of blood, eventually that organ might be lost. Al Nawawi said in the tahtheeb (a book): it is a vesicle and a painful swelling; it comes out with fire (fever), the surrounding of which would become discolored with either black or green or dark purple as if it is blood. Moreover palpitation and fever occurs. It most probably will affect the armpits and the inguinal areas, but may also affect the hands and the fingers and the rest of the body. A group of Doctors among them is Abu Ali bin Sina said: Most apparently it involves the Axillaries or behind the ears or the tip of the nose. He also said: it takes its origin from a poor blood that may turn into

a decayed and degenerated blood. This impure blood converts into a poisonous core. This changes the tissue next to it. Then from there a bad form would travel to the heart that leads to nausea, vomiting, palpitation and fainting. It accepts only what is weak from the organs and the worse is which affects the main organs." <sup>15</sup>

To sum up what the Muslim scholars described for plague; the symptoms are: Nausea, vomiting, fainting, fever, palpitation, blood poisoning (sepsis), ulcers in the peripheries (mostly), Lymph nodes enlargements especially the inguinal and the Axillary nodes and destruction of tissues and organs (gangrene).

### ***2.1.2 The Definition of Plague in modern Science and its symptoms:***

While in modern medicine the symptoms are not much different from those described by the Old Muslim scholars.

ROBERT D. PERRY AND JACQUELINE D. FETHERSTON (1997) have reported that: "Bubonic plague is the classic form of the disease. Patients usually develop symptoms of fever, headache, chills, and swollen extremely tender lymph nodes (buboes) within 2 to 6 days of contact with the organism either by flea bite or by exposure of open wounds to infected materials. In addition, gastrointestinal complaints such as nausea, vomiting, and diarrhea are common skin lesions infrequently develop at the initial site of an infection. Soreness in the affected lymph nodes will sometimes precede swelling, and any of the lymph node areas can be involved, depending upon the site of the initial infection. Buboes are typically found in the inguinal and femoral regions but also occur in other nodes. Bacteremia or secondary plague septicemia is frequently seen in patients with bubonic plague. In one study, blood culture colony counts

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<sup>15</sup> Fathul Barri in the explanation of sahih al bukhari, vol 10 , pages 190-191



ranged from, 10 to  $4 \times 10^7$ /ml. Not surprisingly, patients with colony counts greater than 100/ml had a higher fatality rate, although at least one patient reported to have  $10^7$  bacteria/ml of blood did survive.

Clinically, plague septicemia resembles septicemias caused by other gram-negative bacteria. Patients are febrile, and most have chills, headache, malaise, and gastrointestinal disturbances. There is some evidence that patients with septicemic plague have a higher incidence of abdominal pain than do bubonic plague patients. Primary pneumonic plague is a rare but deadly form of the disease that is spread via respiratory droplets through close contact (2 to 5 ft) with an infected individual. It progresses rapidly from a febrile flu-like illness to an overwhelming pneumonia with coughing and the production of bloody sputum".<sup>16</sup>

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<sup>16</sup> ROBERT D. PERRY AND JACQUELINE D. FETHERSTON , *Yersinia pestis*—Etiologic Agent of Plague, CLINICAL MICROBIOLOGY REVIEWS, Jan. 1997, p. 35–66 Vol. 10, No. 1, Copyright 1997, American Society for Microbiology



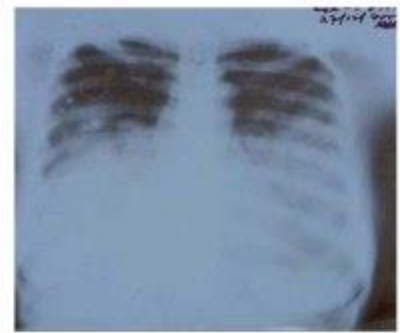
Image.1 a swollen lymph node. Image from : ROBERT D. PERRY AND JACQUELINE D. FETHERSTON , *Yersinia pestis*—Etiologic Agent of Plague,



Bubonic plague



Septicemic plague



Pneumonic plague

Image. 2 types of Plague

Image taken from <http://www.cdc.gov/plague/symptoms/index.html>

In brief, the signs and symptoms of plague described in modern science are pretty much the same as those described by Muslims with few extra symptoms added. It can be seen clearly that the biology scientists have divided plague into three forms. However much of the symptoms are the same.

### **2.1.3. The opinion of Muslim scholars on the cause of Plague:**

Ibn hajr in his book Fath Albari continues talking about plague's causative factor and the authenticity of the prophetic saying about the plague being from the aching of Jin. Also, this is confirmed by Alazurqanni in his explanation of Muttaa Malik.

Few contemporary Muslim scholars denied the authenticity of this prophetic saying and said that this is not true. However, their opinion is not accepted as those specialized in this field say that it is true.

## ***2.2. Bacteria and the Causative bacteria for plague in current day science:***

Bacteria in science:

### **2.2.1. The beginning:**

Burton S. Guttman (1999) said: "Few centuries ago mankind started to be familiar with the organism bacteria. These are minute living creatures that are living unicellularly. It was named because the first one to see them was Anton van Leeuwenhoek under microscope when he saw the rods of anthrax and called them so originating from the Greek word baktron which is a staff rod. Most of bacteria have Pilli to enable them to move freely. Other kinds have other special types of movements. The size of a single cell ranges from 0.1-0.3 till 300-400 micron. Different kinds of bacterial classifications are being implemented nowadays".<sup>17</sup>

Burton S. Guttman (1999) said: "Specialists considered microbes to have come into existence spontaneously without external interference. The process was thought to be through accumulation of amino acids by "themselves". These bacteria can afflict infection and are considered one of the causes of infection alongside with other microorganisms. Also, they are familiar among the biological communities to be unicellular as each single cell works separately and independently. Each cell comprises of a cell wall which surrounds the cell membrane. This membrane encircles the inner part of the cell which is called the cytoplasm. The latter contains the nucleoid which contains the genetic material called DNA. This DNA is responsible for specifying the characteristics of the bacterium and its behavior. It also contains ribosomes which are devices used to produce amino acids then proteins. These ribosomes are utilized

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<sup>17</sup> Burton S. Guttman 1999 page 609- 618

in a lot of intrinsic functions such as antibodies, enzymes and the cellular component itself).<sup>18</sup>

### **2.2.2 What is a cell?**

A cell: it is a functional unit and a building block for the living creatures and is the smallest unit for living. This has the ability to replicate independently. There are different types of cells, each one of them has a specialized function. E.g. in Humans the hepatic cells along with some other cells make up the hepatic tissue. Then with other tissues they make up the liver organ. Therefore, an organ consists of hundreds of millions or billions of cells that all together share in performing the function of the organ.

### **2.2.3 What is a living creature?**

It is a living kind or a living species that has the ability to perform all of its functions independently and can react to stimuli and can grow and replicate and has the ability of metabolism.

### **2.2.4. A misconception in our perception about bacteria:**

It was familiar in the medical and the non-medical fields that bacteria are living unicellularly and are independent on next bacterium for living.

However, nowadays it is a well-accepted scientific fact that bacteria live in communities and not singularly. Here are some of the scientific researches that prove so:

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<sup>18</sup> Burton S. Guttman 1999 page 609- 618

1. Engelberg-Kulka H, Amitai S, Kolodkin-Gal I, Hazan R (2006) have stated: *"Traditionally, programmed cell death (PCD) is associated with eukaryotic multicellular organisms. However, recently, PCD systems have also been observed in bacteria"*<sup>19</sup>

2. Zdena Palková. (2004) Says:

*"Our present in depth knowledge of the physiology and regulatory mechanisms of microorganisms has arisen from our ability to remove them from their natural, complex ecosystems into pure liquid cultures. These cultures are grown under optimized laboratory conditions and allow us to study microorganisms as individuals. However, microorganisms naturally grow in conditions that are far from optimal, which causes them to become organized into multicellular communities that are better protected against the harmful environment. Moreover, this multicellular existence allows individual cells to differentiate and acquire specific properties, such as forming resistant spores, which benefit the whole population"*<sup>20</sup>

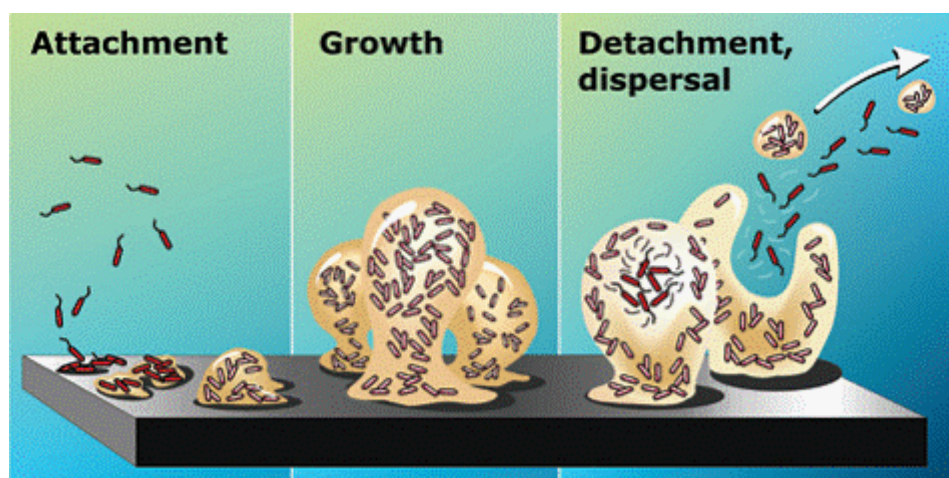


Image.3 The Life cycle of a biofilm. from <http://www.perioprotect.com/images/1msuBiofilm.gif>

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<sup>19</sup> Engelberg-Kulka H, Amitai S, Kolodkin-Gal I, Hazan R (2006) Bacterial Programmed Cell Death and Multicellular Behavior in Bacteria. PLoS Genet 2(10): e135. doi:10.1371/journal.pgen.0020135

<sup>20</sup> Zdena Palková. Multicellular microorganisms: laboratory versus nature EMBO reports, (2004) 5, 470 – 476. Says:

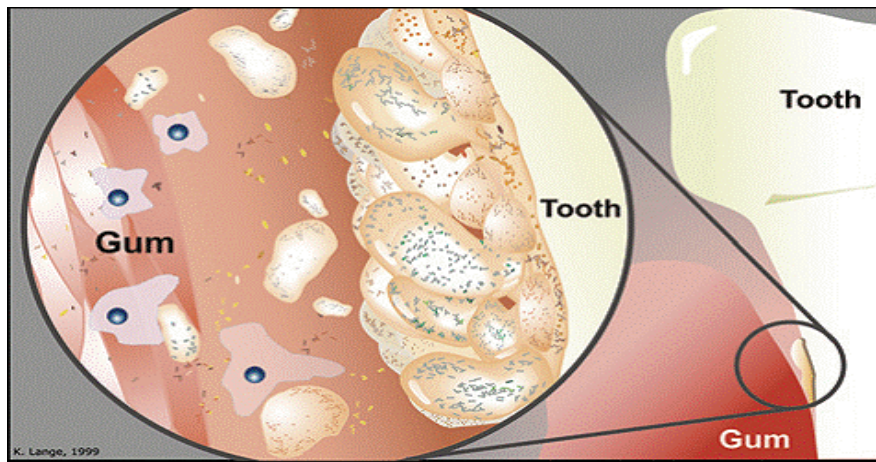


Image 4. Biofilms inside the Mouth. from <http://www.perioprotect.com/images/1msuBiofilm.gif>

3. Mahadevan (2002) says: *“One take-home message from these studies is that we may need to get rid of the implicit conviction that the bacterium, being most familiar to us as a unicellular creature, is also the biological equivalent of the physicist’s ‘independent particle’. The other is that the Petri dish remains a powerful tool to gain new insights on the wonders of the microbial world”*<sup>21</sup>

4. Jeremy S. et al (2003) say:

*"Bacteria growing in biofilms often develop multicellular, three-dimensional structures known as micro-colonies. Complex differentiation within biofilms of Pseudomonas aeruginosa occurs, leading to the creation of voids inside micro-colonies and to the dispersal of cells from within these voids. However, key developmental processes regulating these events are poorly understood. A normal component of multicellular development is cell death".*<sup>22</sup>

<sup>21</sup> Mahadevan, S. Bacterial communication. (2002) In: Journal of Biosciences, 27 (5). pp. 443-444.

<sup>22</sup> Jeremy S. Webb, Lyndal S. Thompson, Sally James, Tim Charlton, Tim Tolker-Nielsen, Birgit Koch, Michael Givskov, and Staffan Kjelleberg . Cell Death in *Pseudomonas aeruginosa* Biofilm Development, doi: 10.1128/JB.185.15.4585-4592.2003 J. Bacteriol. August 2003 vol. 185 no. 15 4585-4592

5. E. Peter Greenberg (2003) says:

*“The existence of species-specific and interspecies bacterial cell-cell communication and group organization was only recently accepted. Researchers are now realizing that the ability of these microbial teams to communicate and form structures, known as biofilms, at key times during the establishment of infection significantly increases their ability to evade both host defenses and antibiotics”*<sup>23</sup>

6. CINDY E. MORRIS, JEAN-MICHEL MONIER, AND MARIE-AGNE`S JACQUES. (1997) say:

*”In many environments, it is common to find assemblages of microorganisms adherent to each other and/or to a surface and embedded in a matrix of exopolymers. These assemblages are referred to as biofilms. Scanning electron microscopy (SEM) images of matrix-enclosed microbial assemblages on leaf surfaces have led some authors to suggest that biofilms occur in the phyllosphere. In other environments, such as aquatic milieu, where biofilms have been studied extensively, the microenvironment and physiology of biofilm bacteria are often markedly different from those of their planktonic counterparts because of some basic properties of many biofilms. (i) Biofilms are composed of an exopolymeric matrix and multiple layers of microbial cells leading to the creation of physical barriers and the establishment of chemical gradients. (ii) They generally contain multiple species of microorganisms, fostering metabolic and genetic exchange.*

*(iii) Many biofilm cells are attached to a surface (biotic or abiotic, including the surface of other microorganisms or debris in the biofilm),*

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<sup>23</sup> E. Peter Greenberg. Bacterial communication and group behavior. J. Clin. Invest. 112:1288–1290 (2003).



*which is requisite for the expression of certain genes. Examples of these properties and their consequences are illustrated in several reviews of biofilm biology and ecology. Hence, biofilms in the phyllosphere could have a significant impact on epiphytic microorganisms”*<sup>24</sup>

7. William J. Brazelton, Mausmi P. Mehta, Deborah S. Kelley, and John A. Baross (2011) have stated: *"Differentiation and syntrophy within a single-species biofilm. All of the evidence that has been presented in this paper and published previously is consistent with the model illustrated in Fig. 5, in which the LCMS phylotype includes genetically heterogenous populations of cells that are differentiated into multiple cell types engaging in metabolic cooperation and LGT. Metabolic and genetic interactions among organisms within biofilm communities are well documented. Because individual cells benefit in numerous ways from their membership in a diverse community, a successful biofilm requires at least some level of cooperation or, at the very least, noncompetition among the members of the community. Although selection still acts on competing lineages, the ability to participate in the community is also a selectable trait. Therefore, biofilm communities can be considered to be inherently social and multicellular. The observations reported in this paper highlight the potential for multicellular characteristics in biofilms even when they are dominated by a single 16S rRNA gene phylotype (e.g., LCMS). Our results are consistent with the provocative study by Boles et al., who showed that during biofilm growth, a clonal population of Pseudomonas*

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<sup>24</sup> CINDY E. MORRIS, JEAN-MICHEL MONIER, AND MARIE-AGNE'S JACQUES. Methods for Observing Microbial Biofilms Directly on Leaf Surfaces and Recovering Them for Isolation of Culturable Microorganism. APPLIED AND ENVIRONMENTAL MICROBIOLOGY, Apr. 1997, p. 1570–1576

*aeruginosa rapidly generates specialized subpopulations that have increased fitness".<sup>25</sup>*

8. Flores E, Herrero A, Wolk CP, Maldener I. (2006) have discussed: *"Filamentous, heterocyst-forming cyanobacteria are multicellular organisms in which individual cells exchange nutrients and, presumably, regulatory molecules. Unknown mechanisms underlie this exchange. Classical electron microscopy shows that filamentous cyanobacteria bear a Gram-negative cell wall comprising a peptidoglycan layer and an outer membrane that are external to the cytoplasmic membrane, and that the outer membrane appears to be continuous along the filament of cells. This implies that the periplasmic space between the cytoplasmic and outer membranes might also be continuous. We propose that a continuous periplasm could constitute a communication conduit for the transfer of compounds, which is essential for the performance of these bacteria as multicellular organisms."*<sup>26</sup>

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<sup>25</sup> William J. Brazelton, Mausmi P. Mehta, Deborah S. Kelley, and John A. Baross, Physiological Differentiation within a Single-Species Biofilm Fueled by Serpentinization, doi: 10.1128/mBio.00127-1126 July 2011 mBio vol. 2 no. 4e00127-11

<sup>26</sup> Flores E, Herrero A, Wolk CP, Maldener I, Is the periplasm continuous in filamentous multicellular cyanobacteria?, Trends Microbiol. 2006 Oct;14(10):439-43. Epub 2006 Aug 23

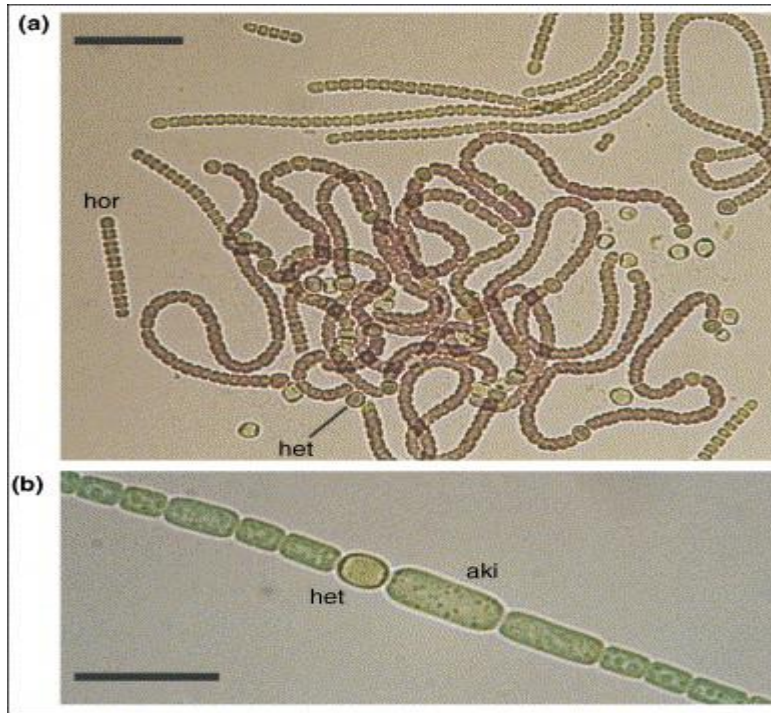


Image. 5 multicellular cyanobacteria, taken from [www.cell.com](http://www.cell.com)

Therefore the reader can notice that these researches confirm that bacteria live in communities.

#### **2.2.5. What about the causative organism of plague, does it live unicellularly or in a multicellular form?**

Studies have shown that the second form is also the existing form for *Yersinia Pestis*.

Hinnebusch BJ, Erickson DL. (2008) say:

”Transmission by fleabite is a relatively recent evolutionary adaptation of *Yersinia pestis*, the bacterial agent of bubonic plague. To produce a transmissible infection, *Y. pestis* grows as an attached biofilm in the foregut of the flea vector. Biofilm formation both in the flea foregut and

in vitro is dependent on an extracellular matrix (ECM) synthesized by the *Yersinia hms* gene products”<sup>27</sup>

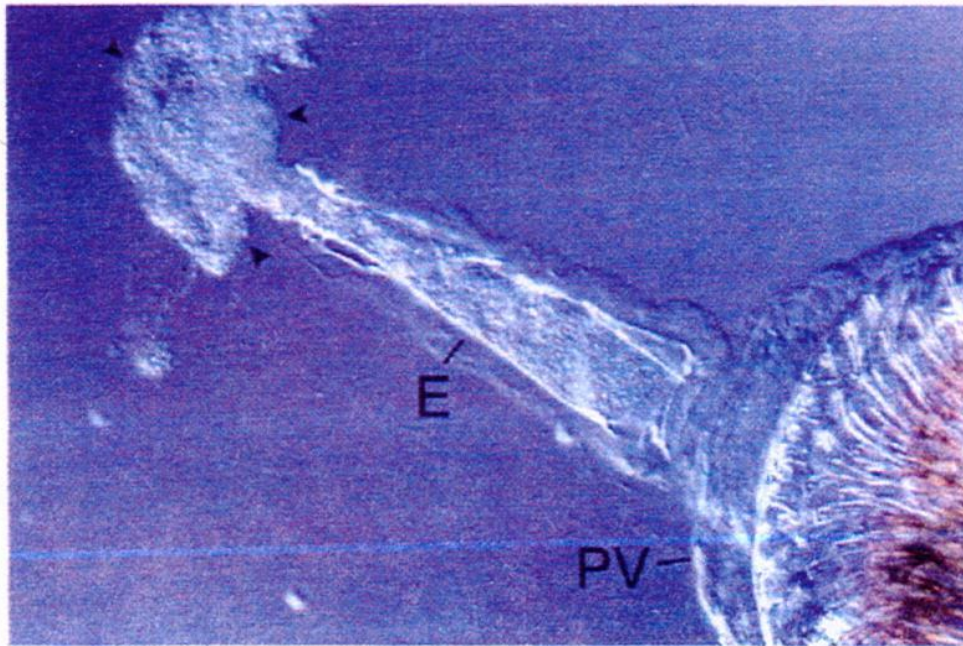


Image. 6 *Y. Pestis* biofilm inside the flea. Image taken from <http://www.ncbi.nlm.nih.gov/pmc/articles/instance/3727414/bin/nihms489972f4.jpg>



Image.7 *Y. Pestis* inside the gut of the flea. Image taken from <http://www.ncbi.nlm.nih.gov/pmc/articles/instance/3727414/bin/nihms489972f1.gif>

Till now it cannot be proved that the saying of the prophet mohammed (peace and blessings be on him) is scientifically false (in the modern scientists point of view). However, there are strong indications that it is true (in the same

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<sup>27</sup> Hinnebusch BJ, Erickson DL. *Yersinia pestis* biofilm in the flea vector and its role in the transmission of plague. *Curr Top Microbiol Immunol*. 2008;322:229-48.

person's point of view). Also, many Muslims will object this point of view; however their opinions are not accepted as our ancestor from the scholars have accepted what is being discussed with no rejection.

### **2.3. Jinn being Able to afflict other diseases in other organs in the human body:**

Narrated Abdullah ibn Mas'ud:

"Zaynab, the wife of Abdullah ibn Mas'ud, told that Abdullah said: I heard the Messenger of Allah (ﷺ) saying: spells, charms and love-potions are polytheism.

I asked: Why do you say this? I swear by Allah, when my eye was discharging I used to go to so-and-so, the Jew, who applied a spell to me.

When he applied the spell to me, it calmed down. Abdullah said:

That was just the work of the Devil who was picking it with his hand, and when he uttered the spell on it, he desisted. All you need to do is to say as the Messenger of Allah (ﷺ) used to say: Remove the harm, O Lord of men, and heal. Thou art the Healer. There is no remedy but Thine which leaves no disease behind."<sup>28</sup>

Although this is a saying of a companion of the prophet Mohammed (peace and blessings be on him), but scholars say the companion's sayings about the unseen are mostly the prophet's words.

Therefore anyone can conclude that jinn also cause eye infection. In this case it most likely could be a suppurative conjunctivitis (discharging corneal infection) as it was discharging and obvious to her.

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<sup>28</sup> Sunan Abi Dawoud, Book 29, hadith 29. <http://sunnah.com/abudawud/29/29>

AHMAD B. TARABISHY, BENNIE H. JENG (2008) say:" Viral conjunctivitis typically presents as an itchy red eye with mild watery discharge. Many patients have signs and symptoms of a viral upper respiratory tract infection (eg, cough, runny nose, congestion) and have been in contact with a sick person. Having both eyes glued shut in the morning had an odds ratio of 15:1 in predicting a positive bacterial culture, whereas either itching or previous conjunctivitis made a bacterial cause less likely"<sup>29</sup>

One can assume that the most common cause of conjunctival infections is bacterial infection.

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<sup>29</sup> AHMAD B. TARABISHY, BENNIE H. JENG, Bacterial conjunctivitis: A review for internists  
10.3949/ccjm.75.7.507Cleveland Clinic Journal of Medicine. July 2008 vol. 75 7507-512

### **3. Chapter Three: Perceiving (recognizing) the devil:**

**What are the characteristics of devil**

**3.1 The deep-rooted and the common concept among Muslims is that jinn cannot be seen at all. Is this concept true?**

The whole issue revolves around this verse, Allah the Most superior says:

O Children of Adam! Let not Satan deceive you, as he got your parents out of Paradise, stripping them of their raiments, to show them their private parts. Verily, he and his tribe see you from where you cannot see them. Verily, We made the devils protectors and helpers for those who believe not. (Surah Al aaraaf 7, verse 27)

**3.2. Muslim scholars have split into four opinions on this point of view**

**Shaikh Abdul kareem ubaidat said:**

"1. Most of the Muslim scholars agree that Jinn can be seen if they reform only sometimes and only for selected people.

2. Those who think that perceiving jinn is special only for prophets (peace on them) only. Amongst those are Al Shafii, Ibn Hazm, Al Nahas and Al Qushairi.

3. The third group denies the perception of jinn by humans whether prophets or non-prophets. Few sayings' (hadith) scholars have this notion.

4. Last group: discuss in detail of perception. They agree that jinn can be seen by prophets in their true form, this is also true for those selected by

Allah from the non-prophets. Among those whom support this perspective are Al Alusi and Ibn Alaarbi."<sup>30</sup>

The opinion the writer choose, is that they can be seen by prophets and some selected humans and also by the use of means other than our direct eyes. This is supported by the saying that will come later in which the Dogs can see jinn directly.

By the will of Allah the last opinion is the true one. This idea is supported by the following saying of the prophet (ﷺ) about the jinn:

**Abu Huraira reported that he heard the Messenger of Allah (ﷺ) saying:**

"A highly wicked one amongst the Jinn escaped yester night to interrupt my prayer, but Allah gave me power over him, so I seized him and intended to tie him to one of the pillars of the mosque in order that you, all together or all, might look at him, but I remembered the supplication of my brother Sulaiman:" My Lord, forgive me, give me such a kingdom as will not be possible for anyone after me (Surah Saad 38, verse35)."<sup>31</sup>

Ibn hajar alasqalani says: "Alkhatabi understood from this saying that the companions of Solomon (peace on him) had seen the Jinn in their actual form while they were working. He also said about the saying of our lord: O Children of Adam! Let not Satan deceive you, as he got your parents out of Paradise, stripping them of their raiments, to show them their private parts. Verily, he and his tribe see you from where you cannot see them. Verily, We made the devils protectors and helpers for those who believe not. (Surah al aaraf, verse 27), Means the greater portion of

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<sup>30</sup> The world of Jinn in the light of Quran and Sunnah, Abdulkarim obaidat, page 29.

<sup>31</sup> Sahih muslim, book 5, hadith49. <http://sunnah.com/muslim/5/49>



humans. The scholars said in response to negating the seeing of jinn in their actual form is not an absolute understanding from the verse but the obvious is that it is possible".<sup>32</sup>

Also it is supported by those two hadiths:

**Narrated Jabir ibn Abdullah:**

The Prophet (ﷺ) said: "When you hear the barking of dogs and the braying of asses at night, seek refuge in Allah, for they see which you do not see".<sup>33</sup>

Abu Huraira reported Allah's Messenger (ﷺ) as saying: "When you listen to the crowing of the cock, ask Allah for His favour as it sees Angels and when you listen to the braying of the donkey, seek refuge in Allah from the Satan for it sees Satan".<sup>34</sup>

If we substitute the meaning of the latter saying which donkeys see jinn to the later one which when we hear dogs and donkeys we have to seek refuge we get the result that dogs see jinn when they bark in the night. This means that to our range of vision (spectrum of vision) devil is transparent. This is supported by the two sayings of the prophet (peace and blessings be on him) that discuss donkey and dogs seeing devil. Also by the saying, when the prophet (peace and blessings be on him) he grabbed the devil in the night and the companions (may Allah be pleased with ) did not see the same devil.

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<sup>32</sup> Fathul baarri in the explanation of Sahih al bukhari

<sup>33</sup> Sunan abi dawud. Book 43, hadith 331. <http://sunnah.com/abudawud/43/331>

<sup>34</sup> Sahih al bukhari, book 59, hadith 111. <http://sunnah.com/bukhari/59/111>

## Here is the story in modern science:

Douglas RH, Jeffery G. (2014) say:

"We examined lenses of 38 mammalian species from 25 families in nine orders and observed large diversity in the degree of short-wavelength transmission. All species whose lenses removed short wavelengths had retinæ specialized for high spatial resolution and relatively high cone numbers, suggesting that UV removal is primarily linked to increased acuity. Other mammals, however, such as hedgehogs, dogs, cats, ferrets and okapis had lenses transmitting significant amounts of UVA (315–400 nm), suggesting that they will be UV-sensitive even without a specific UV visual pigment".<sup>35</sup>

It is a well-documented fact that the human optical spectrum, is between 390nm-740 nm. However the latter research reveals that dogs' lenses can transmit Ultra violet lights ranging between 315-400 nm. Moreover, this range which dogs can visualize is the range under which some kinds of bacteria can be visualized directly on the skin using wood's lamp. Also, this range of frequencies would seem transparent to humans but not those animals.

Schaller, M. et. al. (2005) have written that:

"Porphyrins are further metabolic products of *Propionibacteria*. Their existence has been proved by coral-red fluorescence in the follicle

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<sup>35</sup> Douglas RH, Jeffery G. 2014. The spectral transmission of ocular media suggests ultraviolet sensitivity is widespread among mammals. Proc. R. Soc. B 281:20132995. <http://dx.doi.org/10.1098/rspb.2013.2995>

openings by examining facial skin under Wood's light (ultraviolet-A 320–400 nm)".<sup>36</sup>

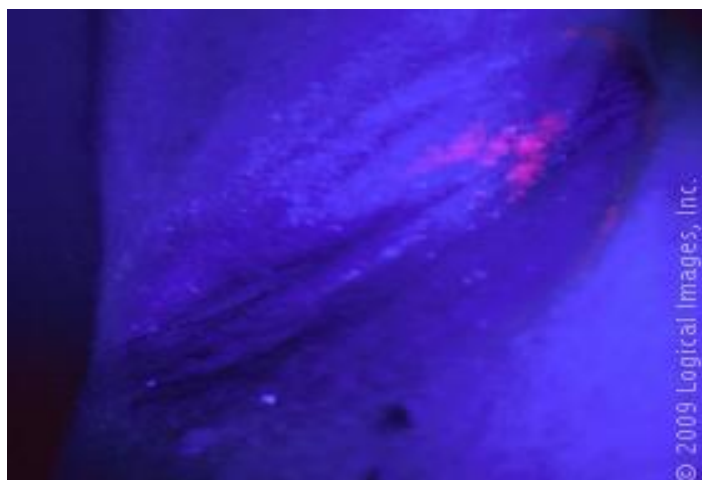


Image. 8. Porphyrin produced by bacteria in the armpit. Image from <http://www.skinsight.com/cosmetics/woodsLampExamination.htm>

Also, the extracellular matrix is transparent.

N RAMAIAH. et. Al. (2000) Say:

“The presence of free, large, discrete polymer particles, known as transparent exopolymer particles (TEP) which are easily assimilable by bacteria (Passow and Alldredge 1995, Smith et al 1995) have been demonstrated to be of great significance in the biogeochemistry of the marine regimes (Alldredge et al 1993; Kumar et al 1998)”.<sup>37</sup>

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<sup>36</sup> Schaller, M.; Loewenstein, M.; Borelli, C.; Jacob, K.; Vogeser, M.; Burgdorf, W.H.; Plewig, G. (2005).

Induction of a chemoattractive proinflammatory cytokine response after stimulation of keratinocytes with *Propionibacterium acnes* and coproporphyrin III. *Br J Dermatol.* 153(1), 66-71.

<sup>37</sup> N RAMAIAH. ; Sarma, V. V. S. S. ; Gauns, Mangesh ; Dileep Kumar, M. ; Madhupratap, M. Abundance and relationship of bacteria with transparent exopolymer particles during the 1996 summer monsoon in the Arabian Sea, *Proc. Indian Acad. Sci. (Earth Planet. Sci.)*, 109, No. 4, December 2000, pp. 443—451

## **4. Chapter Four**

### **Places where devils and jinn can dwell or be found:**

#### **4.1. They are found inside deep water (seas and oceans)**

Allah the Protector says: And of the satans (devils from the jinn) were some who dived for him, and did other work besides that; and it was We Who guarded them. (Surah Al anbia 21, verse 82)

Allah the high says: And also the satans (devils) from the jinn (including) every kind of builder and diver. (Surah Saad 38, verse 37)

If our beloved prophet Mohammed (Peace and blessings on him) has written the Holy Quran, how could have he known about the jinn in the sea at that time which was a non-prosperous era (in the means of technology).

Jabir reported that Allaah's Messenger (peace and blessings on him) said:" iblis places his throne upon water; he then sends detachments (for creating dissension); the nearer to him in rank are those who are most notorious in creating dissension. One of them comes and says: I did so and so. And he says: You have done nothing. Then one amongst them comes and says: I did not spare so and so until I sowed the seed of discord between a husband and a wife. The Satan goes near him and says: 'You have done well. A'mash said: He then embraces him."<sup>38</sup>

One can postulate from this saying that near the surface of water their prevalence increase (which means they are abundant in number near the surface of the water). Also, can conclude that they are present in deep sea places.

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<sup>38</sup> Sahih Muslim, book 52, hadith 60. <http://sunnah.com/muslim/52/60>

N RAMAIAH et al (2000) say:

“Bacterial abundance and production, numbers, sizes and concentrations of transparent exopolymer particles (TEP) and total organic carbon (TOC) were measured during the 1996 summer monsoon to understand the relationship between TEP, the most labile particulate organic carbon, and bacteria. While high regional variability in the vertical distribution of TOC was discernible, TEP concentrations were high in surface waters at 18--20°N along 64°E with concentrations well over 25 mg alginic acid equivalents l<sup>-1</sup> due to upwelling induced productivity”.<sup>39</sup>

Recent studies also have proved that Islam has brought true and precise information. It can be seen that bacteria are abundant in water near the surface and some types of them can live deep inside water.(if we assume that bacteria and jinn are one thing)

Woodall LC et. al 2018: “The deep sea is the largest biome on earth, and microbes dominate in biomass and abundance. Anthropogenic litter is now almost ubiquitous in this biome, and its deposition creates new habitats and environments, including for microbial assemblages. With the ever increasing accumulation of this debris, it is timely to identify and describe the bacterial and archaeal communities that are able to form biofilms on macrodebris in the deep sea”.<sup>40</sup>

Allah the high says: And also the satans (devils) from the jinn (including) every kind of builder and diver. (Surah Saad 38, verse 37)

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<sup>39</sup> N RAMAIAH. ; Sarma, V. V. S. S. ; Gauns, Mangesh ; Dileep Kumar, M. ; Madhupratap, M. Abundance and relationship of bacteria with transparent exopolymer particles during the 1996 summer monsoon in the Arabian Sea, Proc. Indian Acad. Sci. (Earth Planet. Sci.), 109, No. 4, December 2000, pp. 443—451

<sup>40</sup> Woodall LC, Jungblut AD, Hopkins K, Hall A, Robinson LF, Gwinnett C, et al. (2018) Deep-sea anthropogenic macrodebris harbours rich and diverse communities of bacteria and archaea. PLoS ONE 13(11): e0206220. <https://doi.org/10.1371/journal.pone.0206220>

## 4.2. Jinn in Atmosphere

The prophet (peace and blessings on him) said: " the jinn are of three types: one kind has wings and they can fly in the air, one other kind is snakes and dogs, the other type inhabit and travel (trip)." <sup>41</sup>

Hence, one type can fly which means that they can be found in the atmosphere.

Christner, B., Morris, C., Foreman, C., Cai, R., & Sands, D. (2008) have said:

“Despite the integral role of ice nucleators (IN) in atmospheric processes leading to precipitation, their sources and distributions have not been well established. We examined IN (ice nucleators) in snowfall from mid- and high-latitude locations and found that the most active were biological in origin. Of the IN larger than 0.2 micrometer that were active at temperatures warmer than -7°C, 69 to 100% were biological, and a substantial fraction were bacteria. Our results indicate that the biosphere is a source of highly active IN and suggest that these biological particles may affect the precipitation cycle and/or their own precipitation during atmospheric transport”<sup>42</sup>

Natasha DeLeon-Rodriguez, et al. (2013) say: "The composition and prevalence of microorganisms in the middle-to-upper troposphere (8–15 km altitude) and their role in aerosol-cloud-precipitation interactions represent important, unresolved questions for biological and atmospheric

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<sup>41</sup> Altabarani, alhakim, albayhaqi and sahih aljami no. (3114) (Arabic version)

<sup>42</sup> Christner, B., Morris, C., Foreman, C., Cai, R., & Sands, D. (2008). Ubiquity of Biological Ice Nucleators in Snowfall Science, 319(5867), 1214 DOI:10.1126/science.1149757

science. In particular, airborne microorganisms above the oceans remain essentially uncharacterized, as most work to date is restricted to samples taken near the Earth's surface. Here we report on the microbiome of low- and high-altitude air masses sampled onboard the National Aeronautics and Space Administration DC-8 platform during the 2010 Genesis and Rapid Intensification Processes campaign in the Caribbean Sea. The samples were collected in cloudy and cloud-free air masses before, during, and after two major tropical hurricanes, Earl and Karl. Quantitative PCR and microscopy revealed that viable bacterial cells represented on average around 20% of the total particles in the 0.25- to 1- $\mu$ m diameter range and were at least an order of magnitude more abundant than fungal cells, suggesting that bacteria represent an important and underestimated fraction of micrometer-sized atmospheric aerosols. The samples from the two hurricanes were characterized by significantly different bacterial communities, revealing that hurricanes aerosolize a large amount of new cells. Nonetheless, 17 bacterial taxa, including taxa that are known to use C1–C4 carbon compounds present in the atmosphere, were found in all samples, indicating that these organisms possess traits that allow survival in the troposphere. The findings presented here suggest that the microbiome is a dynamic and underappreciated aspect of the upper troposphere with potentially important impacts on the hydrological cycle, clouds, and climate".<sup>43</sup>

One can understand from the studies above that bacteria are available in great no. even in high altitudes in the atmosphere. They are even there during tough storms. This must mean that they (bacteria) have a survival

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<sup>43</sup> Natasha DeLeon-Rodriguez, Terry L. Lathem, Luis M. Rodriguez-R, James M. Barazesh, Bruce E. Anderson, Andreas J. Beyersdorf, Luke D. Ziemba, Michael Bergin, Athanasios Nenes, and Konstantinos T. Konstantinidis Microbiome of the upper troposphere: Species composition and prevalence, effects of tropical storms, and atmospheric implications, PNAS 2013 110: 2575-2580.

mechanism through which they can live, remain, and survive these vigorous conditions. Also, as our prophet said they can be obtainable in the atmosphere (flying)(if we take the assumption of the writer that devil and bacteria are one).

#### **4.3. Jinn in the soil:**

Also the prophet (peace and blessings be on him) clearly states in the former saying that they inhabit the soil (Which means they could be found on and in the soil).

Chan-Wen Xu et al. (2011) say:” This study evaluated the soil characteristics and nitrogen-fixing bacterial (NFB) communities inhabiting the rhizosphere of an invasive plant, *Ageratina adenophora*, in Southwest of China. In a large geographic range, heavily invaded (HI) soils generally had higher nutrient levels compared with lightly invaded (LI) and non-invaded (NI) ones. The NFB number and species diversity of HI soils were significantly greater than those of NI ones. A total of 416 NFB isolates were divided into 47 operational taxonomic units (OTUs). They were phylogenetically categorized into Proteobacteria (63.9%), Actinobacteria (32.2%), Firmicutes (1.9%) and Bacteroidetes (1.9%). At a lower taxonomic level, these isolates were grouped into 20 genera, among which, the dominant isolates”.

This study shows that the soil could be resided by these creatures or not. It is exactly the same as the prophet Mohammed (peace and blessings be on him) said as they inhabit and travel so an area can be free of those.



#### 4.4. Jinn in lavatories:

Moreover, the jinn live in the lavatories.

Narrated Zayd ibn Arqam:

The Messenger of Allah (ﷺ) said: These privies are frequented by the jinns and devils. So when anyone amongst you goes there, he should say: "I seek refuge in Allah from male and female devils."<sup>44</sup>

It can be comprehended that jinn are almost always present in toilets that is why we have to seek refuge whenever we go to these places.

In a bacteriological survey of washrooms and toilets (1976): The author of this paper has written: "A survey of the bacterial flora present at various positions in 130 male and female washrooms and toilets is reported. Several bacteria of faecal origin were found in large numbers: the areas likely to be the most important sources of cross-infection from faecal contamination are indicated. The results are used to assess priorities for disinfection. The species of bacteria found during the survey, their relative frequency and probable origin (Cruickshank, 1968) are shown in Fig. 1. Several are known to cause infection. Previous, less detailed results (Newsom, 1972), are confirmed. Human faeces always contain *Esch. Coli*, *Strep. faecalis*, *Bacteroides* spp. and *Bifidobacterium* spp. Other bacteria such as *Proteus* spp., *Clostridium* spp. and *Klebsiella pneumoniae* occur in about one third of the population (Ketyi & Barna, 1964). Nearly all of these bacteria were isolated in this survey; those not isolated are anaerobic and non-spore forming".<sup>45</sup>

One can postulate that bacteria are abundant in toilets.

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<sup>44</sup> Sahih abi Dawud, Book 1, Hadith 6, <http://sunnah.com/abudawud/1/6>

<sup>45</sup> A bacteriological survey of washrooms and toilets. J. Hyg., Camb. (1976), 76, 183

#### 4.5. In the nose and the Respiratory tract of humans.

Narrated Abu Huraira: The Prophet said, "If anyone of you rouses from sleep and performs the ablution, he should wash his nose by putting water in it and then blowing it out thrice, because satan has stayed in the upper part of his nose all the night."<sup>46</sup>

In the Arabic version it is inside his nose. It can be understood that satan is found in the nose of most research subjects as most of non- Muslims do not clean their nose in the morning. Besides, these researches do not discriminate between practicing Muslims, non- practicing ones or non- Muslims.

Rawlings BA, Higgins TS, Han JK (2013) *have written: "S. pneumoniae* was positively cultured in at least one site in 15% of ill subjects and 31% of well subjects ( $p = 0.006$ ). *H. influenzae* was positively cultured in at least one site in 45% of ill subjects and 31% of well subjects ( $p = 0.027$ ). *M. catarrhalis* was positively cultured in at least one site in 42% of ill subjects and 27% of well subjects ( $p = 0.018$ )"<sup>47</sup>

American Society for Microbiology (2010), The author of this paper has written: "The nose and throat are important sites of pathogen colonization, yet the microbiota of both are relatively unexplored by culture-independent approaches," says Katherine Lemon of Children's Hospital Boston, a lead author on the study that also included researchers

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<sup>46</sup> Sahih al bukhari, book 59, hadith 104. <http://sunnah.com/bukhari/59/104>

<sup>47</sup> Rawlings BA, Higgins TS, Han JK. Bacterial pathogens in the nasopharynx, nasal cavity, and osteomeatal complex during wellness and viral infection. *Am J Rhinol Allergy* 27:39–42, 2013

from Harvard Medical School, Lawrence Berkeley National Laboratory and the University of California, San Francisco.

Until now most of the knowledge of bacteria living in the nose and throat has been generated using culture-based techniques and has primarily focused on identifying pathogenic bacteria. In this study, Lemon and her colleagues examined and compared the bacterial communities from the noses and throats of seven healthy adults using two different culture-independent methods one of which was a 16S rRNA microarray, called the PhyloChip, which possesses 500,000 probes and can detect approximately 8,500 different genetically distinct groups of bacteria. Despite the close physical connection between the nose and throat, the researchers found distinct differences in bacterial populations. In the nose the majority of bacteria found were of the phyla Firmicutes and Actinobacteria and compared to other areas of the body that had been studied the distribution was most reminiscent of the skin. In the throat the majority of bacteria were of the phyla Firmicutes, Proteobacteria and Bacteroidetes and the distribution was more similar to that found in saliva”.<sup>48</sup>

Hence, bacteria are found to be residing the nose and throat of a normal human. Also, that the nose and throat are colonized by these bacteria.

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<sup>48</sup> American Society for Microbiology (2010, June 21). Bacteria in the nose and throat: Most comprehensive comparative analysis

#### **4.6. Jinn inside the ears and some of their products:**

Abdullah (son of Mas'ud) reported that a mention was made of a man who slept the whole night till morning. He (the Holy Prophet) remarked:

"That is a man in whose ears (or in whose ear) the devil urinated."<sup>49</sup>

So urine is one of the byproducts of satan in the ear of those who sleep till the sunrises and do not pray morning prayer. This means that those who do not pray the dawn prayer will have some of the urine material inside their ears to appear as a normal composition of the earwax.

Bortz JT, Wertz PW, Downing DT (1990): "Lipids were extracted from "wet" cerumen and analyzed by quantitative thin-layer chromatography to determine their composition. The lipid fraction comprised 52% of the dry weight of cerumen and consisted of squalene (6.4%), cholesterol esters (9.6%), wax esters (9.3%), triacylglycerols (3.0%), fatty acids (22.7%), cholesterol (20.9%), ceramides (18.6%), cholesterol sulfate (2.0%), and several unidentified polar components (7.5)"<sup>50</sup>

It is obvious that a portion of the ear wax is made from wax esters.

Barney BM, Wahlen BD, Garner E, Wei J, Seefeldt LC (2012): "Wax esters are produced in certain bacteria as a potential carbon and energy storage compound. The final enzyme in the biosynthetic pathway responsible for wax ester production is the bifunctional wax ester synthase/acyl-coenzyme A (acyl-CoA): diacylglycerol acyltransferase

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<sup>49</sup> Sahih muslim, book 6, hadith 245. <http://sunnah.com/muslim/6/245>

<sup>50</sup> Bortz JT<sup>1</sup>, Wertz PW, Downing DT. Composition of cerumen lipids. J Am Acad Dermatol. 1990 Nov;23(5 Pt 1):845-9.

(WS/DGAT), which utilizes a range of fatty alcohols and fatty acyl-CoAs to synthesize the corresponding wax ester."<sup>51</sup>

Hence, bacteria can produce wax esters which are one the composition of earwax.

#### **4.7. Inside Trashes and in Food leftovers**

Waheed aabdusalam bali (may Allah bless him and protect him) said:

"In addition, they dwell the trashes and refuses, because they eat the leftovers of human beings' food as it is authentic in sahih muslim 450." <sup>52</sup>

The prophetic saying is: Dawud reported from 'Amir who said:

I asked 'Alqama if Ibn Mas'ud was present with the Messenger of Allah (ﷺ) on the night of the Jinn (the night when the Prophet met them). He (Ibn Mas'uad) said: No, but we were in the company of the Messenger of Allah (ﷺ) one night and we missed him. We searched for him in the valleys and the hills and said, He has either been taken away (by jinn) or has been secretly killed. He (the narrator) said: We spent the worst night which people could ever spend. When it was dawn we saw him coming from the side of Hiri'. He (the narrator) reported: We said: Messenger of Allah, we missed you and searched for you, but we could not find you and we spent the worst night which people could ever spend. He (the Holy Prophet) said:" There came to me an inviter on behalf of the Jinn and I went along with him and recited to them the Qur'an. He (the

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<sup>51</sup> Barney BM, Wahlen BD, Garner E, Wei J, Seefeldt LC, Differences in substrate specificities of five bacterial wax ester synthases. Appl Environ Microbiol. 2012 Aug;78(16):5734-45. doi: 10.1128/AEM.00534-12. Epub 2012 Jun 8.

<sup>52</sup> waheed aabdusalam bali. The prevention from jinn and satan (wqayat\_alinsan) page 25.. dar ul bashaer.

narrator) said: He then went along with us and showed us their traces and traces of their embers. They (the Jinn) asked him (the Holy Prophet) about their provision and he said: Every bone on which the name of Allah is recited is your provision. The time it will fall in your hand it would be covered with flesh, and the dung of (the camels) is fodder for your animals. The Messenger of Allah (ﷺ) said: Don't perform istinja( cleaning private parts) with these (things) for these are the food of your brothers (Jinn)."<sup>53</sup>

Narrated Abu Huraira: That once he was in the, company of the Prophet carrying a water pot for his ablution and for cleaning his private parts. While he was following him carrying it (i.e. the pot), the Prophet said, "Who is this?" He said, "I am Abu Huraira." The Prophet said, "Bring me stones in order to clean my private parts, and do not bring any bones or animal dung." Abu Huraira went on narrating: So I brought some stones, carrying them in the corner of my robe till I put them by his side and went away. When he finished, I walked with him and asked, "What about the bone and the animal dung?" He said, "They are of the food of jinns. The delegate of jinns of (the city of) Nasibin came to me--and how nice those jinns were--and asked me for the remains of the human food. I invoked Allah for them that they would never pass by a bone or animal dung but find food on them."<sup>54</sup>

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<sup>53</sup> Sahih al bukhari, book 4, hadith 169. <http://sunnah.com/muslim/4/169>

<sup>54</sup> Sahih al bukhari, book 63, hadith 86. <http://sunnah.com/bukhari/63/86>

Miho Aoshima et al (2001) have written:” A commercially available composter was operated using fixed composition of garbage with or without the addition of soybean oil. The composter was operated without adding seed microorganisms or bulking materials. Microflora within the composter were analyzed by denaturing gradient gel electrophoresis (DGGE) in the case of oil addition, or by 16/18 S rRNA gene sequencing of the isolated microorganisms in the case of no oil addition. The results showed that, irrespective of the addition of oil, the bacteria identified were all gram positive, and that lactobacilli seemed to be the key microorganisms”.<sup>55</sup>

Accordingly, bacteria are found in the food leftovers and inside trashes even with no addition of bacterial seeds.

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<sup>55</sup> Miho Aoshima, Mannix Salvador Pedro, Shin Haruta, Linxian Ding, Tomoko Fukada, Asuka Kigawa, Tohru Kodama, Masaharu Ishii, Yasuo Igarashi, Analyses of microbial community within a composter operated using household garbage with special reference to the addition of soybean oil, Journal of Bioscience and Bioengineering, Volume 91, Issue 5, 2001, Pages 456-461, ISSN 1389-1723, 10.1016/S1389-1723(01)80273-5.

<http://www.sciencedirect.com/science/article/pii/S1389172301802735>

#### **4.8. Jinn and satan are also found to inhabit the skin of humans:**

Abdullah ibn Mas'ud reported that Allaah's Messenger (peace and blessings on him) said: "There is none amongst you with whom is not an attache from amongst the jinn (devil). They (the Companions) said: Allaah's Messenger, with you too? Thereupon he said: Yes, but Allaah helps me against him and so I am safe from his hand and he does not command me but for good. "<sup>56</sup>

There is no clear cut evidence to identify the place where that attache can reside. However, it can be hypothesized that it can be on the skin and everywhere else.

Korting HC, Lukacs A, Braun-Falco O. *Hautarzt*. (1998) have mentioned:" The micro-flora resident on human skin shows great inter-individual and intra-individual differences. It is essentially composed of micrococci, staphylococci, aerobic and anaerobic coryneforms as well as pityrosporum species which, in accordance with the different environment in the different regions of the body, are in a steady state. With increasing age, human skin microflora undergoes qualitative changes: the streptococci, which are found in infants, disappear and coryneform bacteria occur, which are mainly responsible for odor production. Anaerobic propionibacteria are more numerous in juveniles and young adults, a fact that may be explained by increased sebum production".<sup>57</sup>

Therefore, there is a bacterial species certain for each individual that is living as a normal flora on the skin of that human.

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<sup>56</sup> Sahih muslim, book 52, hadith 62. <http://sunnah.com/muslim/52/62>

<sup>57</sup> Korting HC, Lukacs A, Braun-Falco O. Mikrobielle Flora und Geruch der gesunden menschlichenHaut. *Hautarzt* 1988; 39:564–568.



## **4.9. They can be detected inside the gastrointestinal tract and digest foods.**

### **4.9.1. Inside the mouth:**

The son of Abu Said al-Khudri reported on the authority of his father that Allah's Messenger (ﷺ) said:

"When one of you yawns, he should try to restrain it with the help of his hand since it is the Satan that enters therein."<sup>58</sup>

Jinn can obviously enter the mouth through true interpretation of this prophetic saying. As it has been mentioned previously most of non-Muslims and non-practicing Muslims as well do not try to restrain yawning. This means that most of those peoples' mouths will be inhabited by jinn

Jørn A. Aas et al (2005) say: "The oral cavity is comprised of many surfaces, each coated with a plethora of bacteria, the proverbial bacterial biofilm. Some of these bacteria have been implicated in oral diseases such as caries and periodontitis, which are among the most common bacterial infections in humans. For example, it has been estimated that at least 35% of dentate U.S. adults aged 30 to 90 years have periodontitis. In addition, specific oral bacterial species have been implicated in several systemic diseases, such as bacterial endocarditis, aspiration pneumonia, osteomyelitis in children, preterm low birth weight, and cardiovascular disease. Surprisingly, little is known about the microflora of the healthy oral cavity."<sup>59</sup>

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<sup>58</sup> Sahih muslim, book 55, hadith 75. <http://sunnah.com/muslim/55/75>

<sup>59</sup> Jørn A. Aas, Bruce J. Paster, Lauren N. Stokes, Ingar Olsen, and Floyd E. Dewhirst Defining the Normal Bacterial Flora of the Oral Cavity. J Clin Microbiol. Nov 2005; 43(11): 5721–5732. doi: [10.1128/JCM.43.11.5721-5732.2005](https://doi.org/10.1128/JCM.43.11.5721-5732.2005)

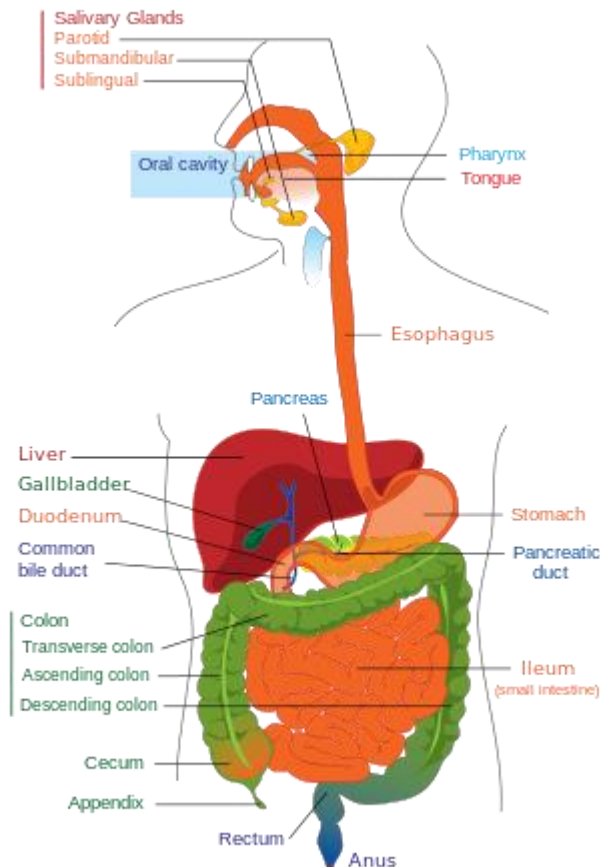


Image 9. The Gastrointestinal tract of humans. Image taken from [https://en.wikipedia.org/wiki/Human\\_gastrointestinal\\_tract](https://en.wikipedia.org/wiki/Human_gastrointestinal_tract)

This means that the oral cavity is contains many species of bacteria that are living as flora.

#### 4.9.2 in the other parts of the Human GIT and digesting food:

Hudhaifa reported: "When we attended a dinner along with the Messenger of Allah (peace and blessings on him) we did not lay our hands on the food until Allah's Messenger (peace and blessings on him) had laid his hand and commenced eating (the food). Once we went with him to a dinner when a girl came rushingly as if someone had been pursuing her. She was about to lay her hand on the food, when Allaah's

Messenger (peace and blessings on him) caught her hand. Then a desert Arab came there (rushing) as if someone had been pursuing him. He (the Prophet) caught his hand; and then Allah's Messenger (peace and blessings on him) said: satan considers that food lawful on which Allah's name is not mentioned. He had brought this girl so that the food might be made lawful for him and I caught her hand. And he had brought a desert Arab so that (the food) might be lawful for him. So I caught his hand. By Him, in Whose hand is my life, it was (satan's) hand that was in my hand along with her hand."<sup>60</sup>

Jabir reported: I heard Allaah's Prophet (peace and blessings on him) saying: "The Satan is present with any one of you in everything he does; he is present even when he eats food; so if any one of you drops a mouthful he should remove away anything filthy on it and eat it and not leave for the devil; and when he finishes (food) he should lick his fingers, for he does not know in what portion of his food the blessing lies."<sup>61</sup>

Two different types of information can be extracted from these three sayings. Firstly, the food which the name of Allah is not mentioned on is liable to be eaten by satan. Secondly, since satan cannot be seen by human eyes one can assume the satan which is eating the food can be swallowed with the food and the drink, so they can be found in the Gastrointestinal tract of humans. Lastly, that devils can digest food (eat it).

René J. Dubos (1940) cited the following: "Wortmann was probably the first physiologist to describe in biochemical terms the mechanism by

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<sup>60</sup> Sahih Muslim, book 36, hadith 133. <http://sunnah.com/muslim/36/133>

<sup>61</sup> Sahih Muslim, book 36, hadith 177. <http://sunnah.com/muslim/36/177>

which living cells can adapt themselves to the utilization of certain foodstuffs. He observed that the cells of an unidentified bacterial species produced amylase when grown in media containing starch, whereas this enzyme failed to appear when the same culture was grown in media which did not contain this polysaccharide”.<sup>62</sup>

Nibedita Kar, Koushik Ghos. (2008) have found: "Isolation and enumeration of heterotrophic bacteria from the gastrointestinal tracts of rohu, *Labeo rohita* and murrel, *Channa punctatus* have been carried out to find out their importance in the nutrition of the host fish. Amylolytic, proteolytic and cellulolytic bacteria were detected in the fish gut. Among specific enzyme producing bacteria, proteolytic and cellulolytic bacteria were present at higher number within the gut of murrel and rohu, respectively”.<sup>63</sup>

These two studies prove that bacteria can digest food through the use of different digestive enzymes.

Also, few other sayings confirm that jinn can enter uncovered food stay there and cause epidemics.

Jabir reported Allah's Messenger (ﷺ) as saying: "Cover vessels, waterskins, close the doors and extinguish the lamps, for the Satan does not loosen the waterskin, does not open the door and does not uncover the vessels. And if one amongst you fails to find (something) to cover it well,

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<sup>62</sup> René J. Dubos, THE ADAPTIVE PRODUCTION OF ENZYMES BY BACTERIA, *Bacteriol Rev.* 1940 March; 4(1): 1–16.

<sup>63</sup> Nibedita Kar, Koushik Ghos. Enzyme Producing Bacteria in the Gastrointestinal Tracts of *Labeo rohita* (Hamilton) and *Channa punctatus* (Bloch). *Turkish Journal of Fisheries and Aquatic Sciences* 8: 115-120 (2008)

he should cover it by placing (a piece of) wood across it." <sup>64</sup> Qutaiba did not mention the closing of the doors in the hadith transmitted by him.

**Jabir bin 'Abdullah reported Allah's Messenger (ﷺ) as saying:**

"Cover the vessels and tie the water-skin, for there is a night in a year when pestilence (epidemic) descends, and it does not pass an uncovered vessel or an untied water-skin but some of that pestilence descending into it." <sup>65</sup>

Concluding from those two sayings, it is clearly visible that epidemic is one type of jinn's harm on human body. However, epidemics are from jinn, but not all jinn cause epidemics. Also, that food transmission is another form of epidemic spread. Finally, if they can cause epidemics through food they absolutely can be found in the stomach.

GRAHAM ET AL (1991) have written:"We enrolled 490 healthy asymptomatic volunteers residing in the Houston metropolitan area. In 441 of the enrollees, the results of both the ELISA and the UBT were concordant; in 44 the results of ELISA were positive and the UBT results negative. Five individuals had a positive UBT and a negative ELISA result and were excluded. The discordant findings were randomly spread, and inclusion or exclusion of those with discordant findings would not change any of the results obtained. H. pylori infection was present in 253 subjects or 52% of the population studied. The subjects ranged in age from 15 to 80 years. The black population represented 35% of the total

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<sup>64</sup> Sahih muslim, book 36, hadith 120. <http://sunnah.com/muslim/36/120>

<sup>65</sup> Sahih muslim, book 36, hadith 129. <http://sunnah.com/muslim/36/129>

population in the geographic area. To compare the frequency of H. pylori infection between races, a similar number of persons from each of the two racial groups were enrolled. The male-female ratio was similar”.<sup>66</sup>

A type of bacteria called H. Pylori is found to dwell the stomach of most people. Few, other researches are present to prove that not all infection can be epidemics. Moreover, epidemic sources can be food.

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<sup>66</sup> Graham DY, Malaty HM, Evans DG, Evans DJ Jr, Klein PD, Adam E., Epidemiology of Helicobacter PyIori in an Asymptomatic Population in the United States: Effect of Age, Race, and Socioeconomic Status. GASTROENTEROLOGY Vol. 100, No.6, June 1991

#### **4.10. Outside the earth**

Also, the jinn can exist on places other than the earth.

Allah (the glorified) says: O assembly of jinn and men! If you have power to pass beyond the zones of the heavens and the earth, then pass beyond (them)! But you will never be able to pass them, except with authority from Allah (Surah Alrahman 55, verse 33)

Allah (the glorified) says: And indeed, We have put the big stars in the heaven and We beautified it for the beholders. (16) And We have guarded it (near heaven) from every outcast devil. (17) Except him (devil) who steals the hearing then he is pursued by a clear flaming fire. (18) (Surah Alhijir 15, verse 16-18).

In the explanation of these verses the cousin of the prophet narrated a saying:

Abdullah. Ibn Abbas reported: A person from the Ansar (supporters of the prophet) who was amongst the Companions of Allah's Messenger (peace and blessings on him) reported to me: As we were sitting during the night with Allah's Messenger (peace and blessings on him), a meteor shot gave a dazzling light. Allah's Messenger (peace and blessings on him) said: What did you say in the pre-Islamic days when there was such a shot (of meteor)? They said: Allah and His Messenger know best (the actual position), but we, however, used to say that that very night a great man had been born and a great man had died, whereupon Allah's Messenger (peace and blessings on him) said: (These meteors) are shot neither at the death of anyone nor on the birth of anyone. Allah, the Exalted and Glorious, issues Command when He decides to do a thing.

Then the Angels carrying the Throne sing His glory, then sing the dwellers of heaven who are near to them until this glory of God reaches them who are in the heaven of this world. Then those who are near the supporters of the Throne ask these supporters of the Throne: What your Lord has said? And they accordingly inform them what He says. Then the dwellers of heaven seek information from them until this information reaches the heaven of the world. In this process of transmission (the jinn snatches) what he manages to overhear and he carries it to his friends. And when the Angels see the jinn they attack them with meteors. If they narrate only which they manage to snatch that is correct but they alloy it with lies and make additions to it."<sup>67</sup>

If anyone says that the heavens mentioned here are the atmosphere and the layers of air that are directly surrounding the earth layer that we live in?

Allah the glorified says: And indeed We have adorned the nearest heaven with lamps, and We have made such lamps (as) missiles to drive away the devils, and have prepared for them the torment of the blazing Fire (5). (Surah Al Mulk 67: Verse 5)

Hence in the nearest heavens are beautified with stars then the lowest heaven is definitely beyond the earth's atmosphere. Furthermore, one can conclude that the remains of the jinns' burnt cells will be found on the meteor. Also, that jinn can survive the atmosphere outside the earth's boundaries.

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<sup>67</sup> Sahih Muslim, Book 39, hadith 171. <http://sunnah.com/muslim/39/171>



[http://science.nasa.gov/science-news/science-at-nasa/1998/ast01sep98\\_1/](http://science.nasa.gov/science-news/science-at-nasa/1998/ast01sep98_1/)  
on 14/2/2012

in this article the following is written: "Space historians will recall that the journey to the stars has more than one life form on its passenger list: the names of a dozen Apollo astronauts who walked on the moon and one inadvertent stowaway, a common bacteria, *Streptococcus mitis*, the only known survivor of unprotected space travel. As Marshall astronomers and biologists met recently to discuss biological limits to life on Earth, the question of how an Earth bacteria could survive in a vacuum without nutrients, water and radiation protection was less speculative than might first be imagined".

Gillet Ph et al (2000) authors say: "We present a study of the textural signature of terrestrial weathering and related biological activity in the Tatahouine meteorite. Scanning and transmission electron microscopy images obtained on the weathered samples of the Tatahouine meteorite and surrounding soil show two types of bacteria-like forms lying on mineral surfaces: (1) rod-shaped forms (RSF) about 70-80 nm wide and ranging from 100 nm to 600 nm in length; (2) ovoid forms (OVF) with diameters between 70 and 300 nm. They look like single cells surrounded by a cell wall. Only Na, K, C, O and N with traces of P and S are observed in the bulk of these objects. The chemical analyses and electron diffraction patterns confirm that the RSF and OVF cannot be magnetite or other iron oxides, iron hydroxides, silicates or carbonates. The sizes of the RSF and OVF are below those commonly observed for bacteria but are very similar to some bacteria-like forms described in the Martian meteorite ALH84001. All the previous observations strongly suggest that

they are bacteria or their remnants. This conclusion is further supported by microbiological experiments in which pleomorphic bacteria with morphology similar to the OVF and RSF objects are obtained from biological culture of the soil surrounding the meteorite pieces. The present results show that bacteriomorphs of diameter less than 100 nm may in fact represent real bacteria or their remnants.”<sup>68</sup>

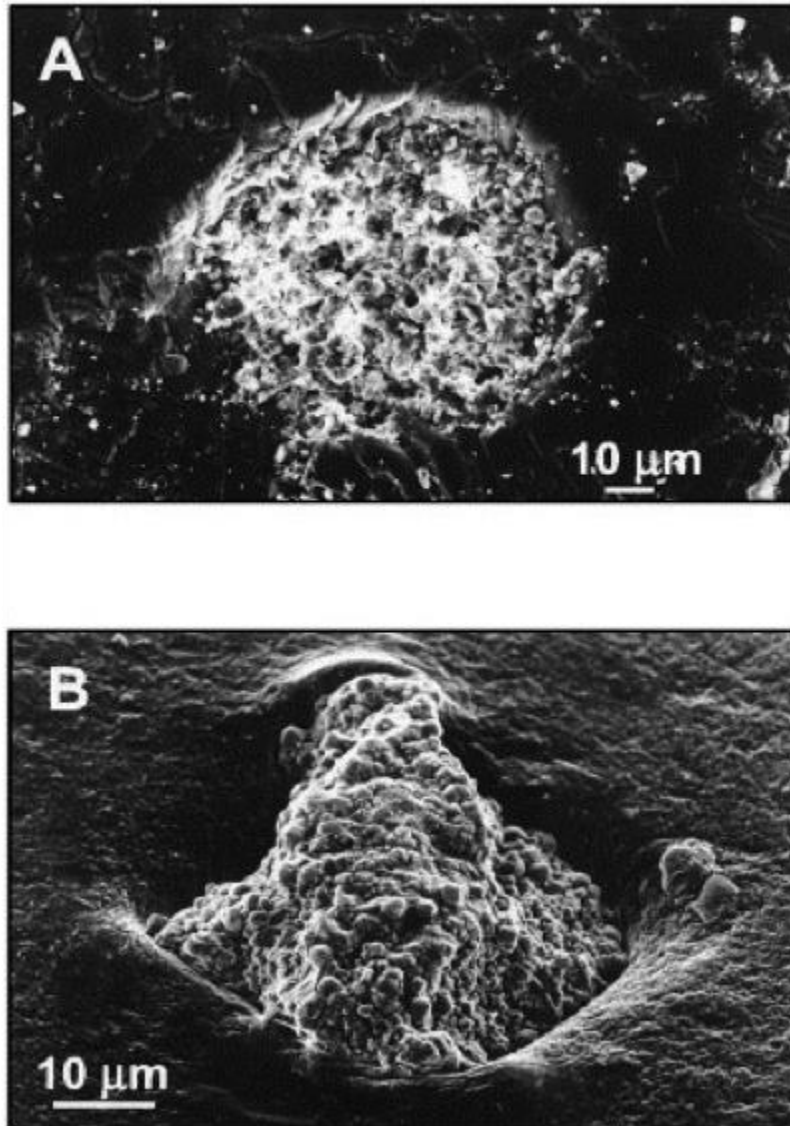


Image. 10. A comparison between remnants on meteorites and bacteriomorphs. Image from. [https://microbewiki.kenyon.edu/index.php/Bacterial\\_Fossils\\_in\\_Meteorites](https://microbewiki.kenyon.edu/index.php/Bacterial_Fossils_in_Meteorites)

<sup>68</sup> Gillet Ph, Barrat JA, Heulin Th, Achouak W, Lesourd M, Guyot E, Benzerara K. Bacteria in the Tatahouine meteorite: nanometric-scale life in rocks. *Earth Planet Sci Lett*. 2000 Feb 15;175(3-4):161-7.

#### **4.11.1 They can be detected in the genitourinary tract.**

Allah (the glorified) says: And excite any of them whom thou canst with thy voice, and urge thy horse and foot against them, and be a partner in their wealth and children, and promise them. Satan promiseth them only to deceive. (17) (Al-Isra 17: Verse 64)

One can inquire how satan can be a partner in the children of humans?

The explanation is through understanding this saying: Narrated Ibn 'Abbas: Allah's Apostle said, "If anyone of you, when intending to have a sexual relation (sleep) with his wife, says: Bismillah, Allahumma jannibna ashshaitan, wa Jannib ash-shaitana ma razaqtana, satan would never harm that child, should it be ordained that they will have one (Because of that sleep)."<sup>69</sup>

This verse and hadith was explained by the follower (tabbii) mujahid (may Allah have mercy on) : that whenever a person intends to perform sexual relationship with his wife if he does not mention the following supplication, then satan will have relationship with his wife also.( which means that these creatures can be found in genitourinary system).<sup>70</sup>

(Although in Islam apart from the prophet (peace and blessings on him) word, a person's saying alone is not accepted. But, the saying of the follower is supported by the prophetic saying and it is only its explanation).

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<sup>69</sup> Sahih Al Bukhari, Book 97, Hadith 25. <http://sunnah.com/bukhari/97/25>

<sup>70</sup> The book fath albari fi sharh sahih albukhari. Ibn hajar alaasqlani. (9/137) (the Arabic version)  
<http://www.almeshkat.net/vb/showthread.php?t=84408>

This means that jinn can be detected in the Genito-Urinary tract of mankind especially during the act of conjugation.

Gil VE et al have reported: “China's opening to the world has enabled massive social and economic transformations and the liberalization of many policies, but also the rise of coincident social problems and diseases. A revival of wide-scale female prostitution since the 1980s has now accelerated to a nationwide dilemma. Prostitutes have long been considered to be reservoirs, if not ‘vectors’ for the transmission of sexual diseases. A well established STD epidemic in the last decade, plus the presence of growing HIV infections in China now, underscore the need to evaluate the prostitute's role in STD and HIV propagation. This report examines unobtrusive data on female prostitutes in the People's Republic of China through an analysis of prison records from eight sexually segregated prisons (six in Sichuan Province and two in Guizhou Province), two female re-education institutions, and arrest records for convicted prostitutes from four counties in Sichuan Province and Chengdu City (also in Sichuan). Collectively, these data represent 2057 female prostitution cases, and span the years 1988–1990. Demographics are examined to enable a profile of the prostitute as based on data reviewed, and this is contrasted to the stereotype of the prostitute as described in government propaganda against prostitution. STD prevalence rates in the samples are examined and contrasted to two other studies on STDs in non-prostitution populations made available to the authors. Prostitute arrest records reveal a majority had active STD infection[s] at the time of their apprehension, with gonorrhea being the most common bacterium; in many instances, prostitutes also had a history of other sexually transmitted diseases. Thus, data examined support the notion of prostitution as an agent in STD transmission. Presence of HIV

infection in prostitutes could not be corroborated through sampled records, nor could prostitution itself be confirmed as an agent in HIV transmission at present. However, given the type of clients serviced by prostitutes in China, a prostitute's own risk of HIV infection is discussed. Control measures by the Chinese government to curb prostitution are examined at both national and provincial levels. Questions are raised as to the effectiveness of present tactics as adjunctive strategies in reducing STD infection and HIV risk in the prostitution population”.<sup>71</sup>

Simone Filardo et. al 2019 say: “In conclusion, our findings could have important clinical implications since the biofilm associated with *Candida* or *Gardnerella* genital infections may act as a chlamydial reservoir contributing to the transmission of *C. trachomatis* in the population, alongside its dissemination in the female upper genital tract. The survival of *C. trachomatis* within the biofilm may also help to explain the increased risk of PID in *C. trachomatis*-infected women who also use IUDs, where the biofilm formation is more likely to happen.”<sup>72</sup>

A plethora of research is found on STD, anyone can search the web for them.

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<sup>71</sup> Gil VE, Wang MS, Anderson AF, Lin GM, Wu ZO. Prostitutes, prostitution and STD/HIV transmission in Mainland China, *Social Science & Medicine*, Volume 42, Issue 1, Pages 141-152

<sup>72</sup> Simone Filardo, Marisa Di Pietro, Giulia Tranquilli, and Rosa Sessa. Biofilm in Genital Ecosystem: A Potential Risk Factor for *Chlamydia trachomatis* Infection. *Canadian Journal of Infectious Diseases and Medical Microbiology* / 2019, Volume 2019 |Article ID 1672109 | 6 pages | <https://doi.org/10.1155/2019/1672109>

#### **4.11.2. Excess uterine bleeding:**

##### **Narrated Hammah Daughter of Jahsh:**

Hammah said my menstruation was great in quantity and severe. So I came to the Messenger of Allah (ﷺ) for a decision and told him. I found him in the house of my sister, Zaynab, daughter of Jahsh.

I said: Messenger of Allah, I am a woman who menstruates in great quantity and it is severe, so what do you think about it? It has prevented me from praying and fasting.

He said: I suggest that you should use cotton, for it absorbs the blood. She replied: It is too copious for that. He said: Then take a cloth. She replied: It is too copious for that, for my blood keeps flowing. The Messenger of Allah (ﷺ) said: I shall give you two commands; whichever of them you follow, that will be sufficient for you without the other, but you know best whether you are strong enough to follow both of them.

He added: This is a stroke of the Devil, so observe your menses for six or seven days, Allah alone knows which it should be; then wash. And when you see that you are purified and quite clean, pray during twenty-three or twenty-four days and nights and fast, for that will be enough for you, and do so every month, just as women menstruate and are purified at the time of their menstruation and their purification.

But if you are strong enough to delay the noon (Zuhr) prayer and advance the afternoon ('Asr) prayer, to wash, and then combine the noon and the afternoon prayer; to delay the sunset prayer and advance the night prayer, to wash, and then combine the two prayers, do so: and to wash at dawn, do so: and fast if you are able to do so if possible.

The Messenger of Allah (ﷺ) said: Of the two commands this is more to my liking.<sup>73</sup>

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<sup>73</sup> Sunan Abi Dawod, Book 1, hadith 287.<http://sunnah.com/abudawud/1/287>

From this hadith one can postulate that they (jinn) can cause excess uterine bleeding.

Toth, Miklos et al (2007) have said: "The purpose was to identify distinct inflammatory markers in endometrial tissues of women with abnormal uterine bleeding (AUB) and *Chlamydia trachomatis* infection.

#### Method of study

Archived endometrial specimens from 92 randomly selected premenopausal women with AUB were examined for *C. trachomatis* using the species-specific monoclonal antibody against major outer membrane protein (MOMP) and for histopathology associated with inflammation. Statistical analyses included single and multiple logistic regression. Diagnostic accuracy was summarized using receiver operating characteristic (ROC) curves.

#### Results

*Chlamydia trachomatis* was detected in 44 (48%) of 92 AUB specimens.

#### Conclusion

The prevalence of *C. trachomatis* in women with AUB is underestimated. Macrophages appear to be a strong marker for the presence of *C. trachomatis* in the endometrium."<sup>74</sup>

Obviously, bacteria also can cause excess and abnormal uterine bleeding.

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<sup>74</sup> Toth, Miklos; Patton, Dorothy L.; Esquenazi, Benjamin; Shevchuk, Maria; Thaler, Howard; Divon, Michael, Association Between *Chlamydia trachomatis* and Abnormal Uterine Bleeding ,American Journal of Reproductive Immunology, Volume 57, Number 5, May 2007, pp. 361-366(6)

## 5. Chapter Five

### Other Features of devils:

#### 5.1. Jinn run inside the Human Blood Vessels:

Anas reported that when Allah's Messenger (ﷺ) was in the company of one of his wives a person happened to pass by them. He called him and when he came, he said to him:

"O so and so, she was my such and such wife. Thereupon he said, Allah's Messenger, if I were to doubt at all, I would have entertained no doubt about you at least. Thereupon Allah's Messenger (ﷺ) said: **Verily Satan circulates in the body like blood.**"<sup>75</sup>

Narrated `Ali bin Al-Husain:

Safiya, the wife of the Prophet (ﷺ) told me that she went to Allah's Messenger (ﷺ) to visit him in the mosque while he was in I'tikaf in the last ten days of Ramadan. She had a talk with him for a while, then she got up in order to return home. The Prophet (ﷺ) accompanied her. When they reached the gate of the mosque, opposite the door of Um-Salama, two Ansari men were passing by and they greeted Allah's apostle. He told them: Do not run away! And said, "She is (my wife) Safiya bint Huyai." Both of them said, "Subhan Allah, (How dare we think of any evil) O Allah's Messenger (ﷺ)!" And they felt it. The Prophet said (to them), **"Satan reaches everywhere in the human body as blood reaches in it,** (everywhere in one's body). I was afraid lest Satan might insert an evil thought in your minds."<sup>76</sup>

This saying denotes that they (jinn) are found inside the humans where the blood can reach. It is very distinct to all those whom have knowledge.

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<sup>75</sup> Sahih Muslim, Book 39, hadith 32. <http://sunnah.com/muslim/39/32>

<sup>76</sup> Sahih Al Bukhari, Book 33, hadith 10. <http://sunnah.com/bukhari/33/10>



Richard W. McLaughlin et al (2002) authors say: "In our search for spirochetes involved in Alzheimer's disease, we observed pleomorphic bacteria in the blood of healthy human subjects by dark-field microscopy. This was a surprising finding since it is generally acknowledged that the blood stream in healthy humans is a sterile environment except when there is a breach in the integrity of the tissue membranes. However, the concept of the occurrence of bacteria in the blood of healthy humans is now more plausible because of cultivation-independent laboratory approaches.

They also say:

"Our report of naturally occurring viable pleomorphic bacteria in the blood of healthy humans should not be controversial. G. Tedeshi et al. at the University of Camerino in Italy had reported the presence of similar bacteria as intraerythrocytic parasites of clinically healthy human subjects in 1969 in the journal *Nature*. They showed that red blood cells increased the uptake or incorporation of radioactive thymine, uridine, and glycine because of the presence of these bacteria. Incorporation of these compounds is not part of the normal metabolic activity of erythrocytes. The recent finding of bacterial 16S rDNA in the blood of healthy human subjects by Nikkari et al. adds credibility to our findings".<sup>77</sup>

CASTILLO DIEGO J. et al 2019 Say : "Evidence indicative of the presence of a microbial component in the blood of healthy human individuals is, nevertheless, steadily accumulating and recent studies have identified comparable bacterial phyla in the blood of healthy individuals

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<sup>77</sup> Richard W. McLaughlin, Hojatollah Vali, Peter C. K. Lau, Roger G. E. Palfree, Angela De Ciccio, Marc Sirois, Darakhshan Ahmad, Richard Villemur, Marcel Desrosiers and Eddie C. S. Chan. Are There Naturally Occurring Pleomorphic Bacteria in the Blood of Healthy Humans? *J. Clin. Microbiol.* 2002, 40(12):4771. DOI:

([McLaughlin et al., 2002](#); [Amar et al., 2011, 2013](#); [Dinakaran et al., 2014](#); [Gosiewski et al., 2016](#); [Païssé et al., 2016](#); [Li et al., 2018](#); [Loohuis et al., 2018](#); [Whittle et al., 2018](#); [Qiu et al., 2019](#)). Not discounting the shortcomings of each of the cited studies, a coherent picture of the healthy HBM emerges when one considers the positive aspects introduced by each study. For example, the inclusion of microscopy ([McLaughlin et al., 2002](#)) and the application of both DNA ([Dinakaran et al., 2014](#); [Païssé et al., 2016](#); [Li et al., 2018](#); [Whittle et al., 2018](#)) and RNA analyses to the blood of healthy individuals ([Loohuis et al., 2018](#); [Whittle et al., 2018](#)). From the literature reviewed here, and taking into consideration the trend toward including analytical (positive and negative) controls in HBM-related studies, we conclude that the notion that a healthy (non-diseased) human blood-microbiome exists cannot simply be discarded.”<sup>78</sup>

This research clearly indicates that bacteria are found inside the blood of non-infected subjects. Also, there are tons of researches that prove that bacteria can be found inside the blood of the infected person in the biofilm form.

Marcia A. Ryder (2005) has written:” Almost all micro-organisms subsist in elaborate colonies that are embedded in biofilms of self-produced exopolymer matrices. The biofilm allows the micro-organisms to adhere to any surface, living or nonliving. The adaptive and genetic changes of the micro-organisms within the biofilm make them resistant to all known antimicrobial agents. Thus, the diagnostic and therapeutic strategies used to fight acute infections are not effective in eradicating medical device

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<sup>78</sup> CASTILLO DIEGO J., RIFKIN RIAAN F., COWAN DON A., POTGIETER MARNIE. THE HEALTHY HUMAN BLOOD MICROBIOME: FACT OR FICTION?. FRONTIERS IN CELLULAR AND INFECTION MICROBIOLOGY. VOLUME=9, 2019.PAGES=148. URL=HTTPS://WWW.FRONTIERSIN.ORG/ARTICLE/10.3389/FCIMB.2019.00148 .DOI=10.3389/FCIMB.2019.00148. ISSN=2235-2988

biofilm-related infections or chronic biofilm diseases. Today, vascular catheter-related bloodstream infections are the most serious and costly healthcare-associated infections”.<sup>79</sup>

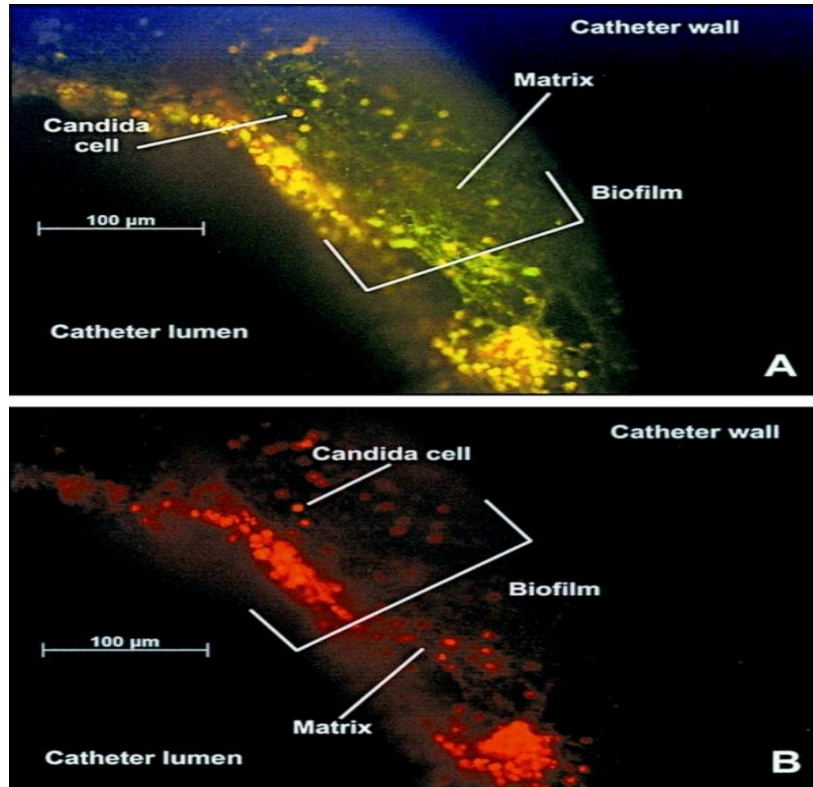


Image. 11. Biofilm inside catheters . image taken from Marcia A. Ryder, Catheter-Related Infections: It's All About Biofilm

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<sup>79</sup> Marcia A. Ryder, Catheter-Related Infections: It's All About Biofilm. Posted: 08/18/2005; Topics in Advanced Practice Nursing eJournal. 2005;5(3) © 2005 Medscape.

### **5.2.1 Jinn can whisper:**

Another characteristic of satan and jinn is also described in Quran.

In the name of Allah, the Beneficent, the Merciful

Say: I seek refuge in the Lord of mankind, (1) The King of mankind, (2) The God of mankind, (3) From the evil of the sneaking whisperer, (4) Who whispereth in the hearts of mankind, (5) Of the jinn and of mankind. (6) (Surah An-Nas, chapter 114)

Therefore one can speculate that satan whispers.

Allah the Great says: Then satan whispered suggestions to them both in order to uncover that which was hidden from them of their private parts (before); he said: "Your Lord did not forbid you this tree save that you should become angels or become of the immortals." (Suarh Al aaraf 7: verse 20)

Allah the Great says: Then shaitan (Satan) whispered to him, saying: "O Adam! Shall I lead you to the Tree of Eternity and to a kingdom that will never waste away? (Surah Taha 20: verse120)

So one can figure out that the sound waves which are produced by satan are in a range which a human can hear because Adam (peace on him) heard his speech as a whisper.

Coming to the scientific point of view one can refer to the following resource in which Matsushashi et al (1998) reported: "Sound waves emitted from cells of Bacillus subtilis at frequencies between 8 and 43

kHz with broad peaks at approximately 8.5, 19, 29, and 37 kHz were detected using a sensitive microphone system”.<sup>80</sup>

Mahadevan, S (2002) has also referred: “Matsushashi et al (1998) explored the possibility of sonic communication being involved. Amazingly, when they replaced the signaling population with a sound generator that produced audio frequencies in the range of 10 kHz to 40 kHz at a power output of ~ 50 mW, the phenomenon persisted (which is not to say that 50 mW is also the rate of sound energy production by bacteria in the original experimental situation). Clipboard To put these figures in perspective, the human ear can detect sounds whose frequencies vary from about 20 Hz to 20 kHz; and the threshold of hearing at 0 dB corresponds to a pressure level of 10–12 watts/m<sup>2</sup> (the dynamic range goes up to 10 watts/m<sup>2</sup> ). This level is usually measured at 1000 Hz, as we do not hear sounds of all frequencies with the same sensitivity. It should be kept in mind that the power output of a sound source is a characteristic of the source and does not account for the position (distance from source) of the observer. A better comparison would be to human vocalization rather than hearing. The acoustic power output for a whispering human voice is about 10–9 watts.”<sup>81</sup>

So bacteria can produce sound waves.

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<sup>80</sup> Matsushashi M, Pankrushina AN, Takeuchi S, Ohshima H, Miyoi H, Endoh K, Murayama K, Watanabe H, Endo S, Tobi M, Mano Y, Hyodo M, Kobayashi T, Kaneko T, Otani S, Yoshimura S, Harata A, Sawada T, “Production of sound waves by bacterial cells and the response of bacterial cells to sound”, *The Journal of General and Applied Microbiology*, Vol. 44, pp.49-55 (1998).

<sup>81</sup> Mahadevan, S, Bacterial communication. (2002) Bacterial communication. In: *Journal of Biosciences*, 27 (5). pp. 443-444

### 5.2.2. Communication between Jinn:

Allah the great says: Say (O Muhammad): It is revealed unto me that a company of the Jinn gave ear, and they said: Lo! we have heard a marvelous Qur'an, (1) Which guideth unto righteousness, so we believe in it and we ascribe unto our Lord no partner. (2) And (we believe) that He - exalted be the glory of our Lord! - hath taken neither wife nor son, (3) (Surah al jinn 72: verses 1-3)

Moreover, this verse denotes that jinn and satan can communicate with each other and are influenced by sound waves.

Allah the magnificent says: And (remember) when We sent towards you (Muhammad SAW) a group of the jinn, listening to the Qur'an, when they stood in the presence thereof, they said: "Listen in silence!" And when it was finished, they returned to their people, as warners. (29) They said: "O our people! Verily! We have heard a Book sent down after Moses, confirming what came before it, it guides to the truth and to a Straight Path. (Surah Al Ahqaf 46:Verses 29-30)

Abu al-Malih reported on the authority of a man :

I was riding on a mount behind the prophet (May peace be upon him). It stumbled. Thereupon I said: May the devil perish! He said: do not say; may the devil perish! For you say that, he will swell so much so that he will be like a house, and say: by my power. But say: in the name of Allah; for when you say that, he will diminish so much so that he will be like a fly.<sup>82</sup>

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<sup>82</sup> Sahih Sunan Abi Dawoud, Book 43, hadith 210. <http://sunnah.com/abudawud/43/210>

Clearly these evidences in Islam show that they can communicate and their growth is affected by speech (sound waves)

Matsuhashi et al, (1998) reported that:” Bacterial cells enhance the proliferation of neighboring cells under stress conditions by emitting a physical signal. Continuous single sine sound waves produced by a speaker at frequencies of 6–10, 18–22, and 28–38 kHz promoted colony formation by *Bacillus carboniphilus* under non permissive stress conditions of high KCl concentration and high temperature frequencies in the same range (10 kHz– 40 kHz), though at substantially lower intensities, could be detected from populations of *B. subtilis* using a sensitive microphone”<sup>83</sup>

Mahadevan, S (2002) reported: ”So, with some license, one might say that bacteria talk to each other. Note that the relevant wavelengths are in the range of 1–3 cm, which are  $10^4$ -fold or so larger than the length of a single bacterium. The mechanism whereby the sounds are generated is unknown; clearly, a collective phenomenon is indicated. How the signal is received and acted upon remains a mystery as well. The isolation of mutants deficient in the transmission and reception of the signal, which remains to be undertaken, will be an important step in elucidating the bases of these unusual examples of bacterial communication”.<sup>84</sup>

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<sup>83</sup> Matsuhashi M, Pankrushina AN, Takeuchi S, Ohshima H, Miyoi H, Endoh K, Murayama K, Watanabe H, Endo S, Tobi M, Mano Y, Hyodo M, Kobayashi T, Kaneko T, Otani S, Yoshimura S, Harata A, Sawada T, “Production of sound waves by bacterial cells and the response of bacterial cells to sound”, *The Journal of General and Applied Microbiology*, Vol. 44, pp.49-55 (1998).

<sup>84</sup> Mahadevan, S ,Bacterial communication. (2002) Bacterial communication. In: *Journal of Biosciences*, 27 (5). pp. 443-444

Sarvaiya, N., Kothari, V (2015) said : “Effect of a type of Indian classical music (Raag Kirwani) comprised of the sound corresponding to a frequency range of 38–689 Hz, on microbial growth, production of certain important metabolites, and antibiotic susceptibility was investigated. All the bacteria and yeasts used as test organisms were found to register better (3.15–40.37% higher) growth under the influence of music, except *Serratia marcescens*. Music treatment was also found to affect production of bacterial pigments (prodigiosin and violacein) whose production is normally linked with quorum-sensing in the producing bacteria. All the test organisms exhibited an increased antibiotic susceptibility (increase ranging from 3.81–18.69%) under the influence of music.”<sup>85</sup>

So evidently bacteria can produce sound waves of 10000 times larger than their size and can communicate between each other. Also they can stimulate growth of other biofilms through emitting sound waves. Moreover, their growth is enhanced by music.

### **5.3. The First time of existence of Jinn:**

Also, Islam clearly says that jinn were created or found to exist before Humans.

Allah the all knower says: And indeed, We created man from dried (sounding) clay of altered mud. (26) And the jinn, we created aforetime from the smokeless flame of fire. (Surah Al hijr 15: Verses26-27)

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<sup>85</sup> Sarvaiya, N., Kothari, V. Effect of audible sound in form of music on microbial growth and production of certain important metabolites. *Microbiology* **84**, 227–235 (2015).  
<https://doi.org/10.1134/S0026261715020125>



Bacteria in modern medicine are found to exist much before humans.

Graves N.(2004) reported: “Bacteria first appeared on earth about 3.6 billion years ago, long before the appearance of Homo sapiens around 100,000 years ago”<sup>86</sup>

Birger Rasmussen, Ian R. Fletcher, Jochen J. Brocks & Matt R. Kilburn. (2008) documented that: ”The oldest widely accepted evidence for oxygenic photosynthesis has come from hydrocarbons extracted from ~2.7-Gyr-old shales in the Pilbara Craton, Australia, which contain traces of biomarkers (molecular fossils) indicative of eukaryotes and suggestive of oxygen-producing cyanobacteria.” <sup>87</sup>

Human Evolution by The Smithsonian Institution's Human Origins Program". Cited in this article: “Humans (known taxonomically as Homo sapiens, Latin for "wise man" or "knowing man" are the only living species in the Homo genus. Anatomically modern humans originated in Africa about 200,000 years ago, reaching full behavioral modernity around 50,000 years ago”.<sup>88</sup>

So based on the above evidences one can state that, It is evident that bacteria first existed before humans.

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<sup>86</sup> Graves N. Economics and preventing hospital-acquired infection. Emerg Infect Dis. 2004;10:561-566.

<sup>87</sup> Birger Rasmussen, Ian R. Fletcher, Jochen J. Brocks & Matt R. Kilburn. Reassessing the first appearance of eukaryotes and cyanobacteria. Nature455, 1101-1104 (23 October 2008)

<sup>88</sup> Human Origins Initiative.Smithsonian Institution. Retrieved 2010-08-30., as from Wikipedia

#### **5.4. satan's life expectancy:**

It is well recorded that these creatures have very long life span:

Allah the glorified says that: [iblis (satan)] said: "O my Lord! Give me then respite till the Day they will be resurrected." (36) Allah said: "Then, verily, you are of those reprieved, (37) "Till the Day of the time appointed." (38) ( Surah Al hijir 15: Verses 36-38)

Therefore, if iblis (the father of jinn= their origin) has a longer life span than our father Adam (peace on him), his progeny will have longer life span than us(the progeny of Adam).

RJ Cano and MK Borucki, They have recorded:" A bacterial spore was revived, cultured, and identified from the abdominal contents of extinct bees preserved for 25 to 40 million years in buried Dominican amber. Rigorous surface decontamination of the amber and aseptic procedures were used during the recovery of the bacterium. Several lines of evidence indicated that the isolated bacterium was of ancient origin and not an extant contaminant. The characteristic enzymatic, biochemical, and 16S ribosomal DNA profiles indicated that the ancient bacterium is most closely related to extant *Bacillus sphaericus*".<sup>89</sup>

Sarah S. Johnson et al (2007) said: "Our results show evidence of bacterial survival in samples up to half a million years in age, making this the oldest independently authenticated DNA to date obtained from viable

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<sup>89</sup> RJ Cano and MK Borucki, Revival and identification of bacterial spores in 25- to 40-million-year-old Dominican amber, Science 19 May 1995: Vol. 268 no. 5213 pp. 1060-1064

cells. Additionally, we find strong evidence that this long-term survival is closely tied to cellular metabolic activity and DNA repair that over time proves to be superior to dormancy as a mechanism in sustaining bacteria viability”.<sup>90</sup>

### **5.5. satan and the sunlight:**

Also the prophet (peace and blessings on him) mentioned that these creatures dislike the sunlight and spread during the night. If one searches for the contents of the sun rays, ultraviolet is one, which is a disinfectant.

**Narrated Jabir:** The Prophet said, "When night falls, then keep your children close to you, for the devil spread out then. An hour later you can let them free; and close the gates of your house (at night), and mention Allah's Name thereupon, and cover your utensils, and mention Allah's Name thereupon, (and if you don't have something to cover your utensil) you may put across it something (e.g. a piece of wood etc.)." <sup>91</sup>

**It was narrated from Ibn Buraidah, from his father,** that the Prophet(ﷺ) : "forbade sitting between the shade and sun."<sup>92</sup>

**In another narration** the prophet (peace and blessings on him explained the reason of forbiddance and said it is the seating of satan<sup>93</sup>.

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<sup>90</sup> Sarah Stewart Johnson, Martin B. Hebsgaard, Torben R. Christensen, Mikhail Mastepanov, Rasmus Nielsen, Kasper Munch, Tina Brand, M. Thomas P. Gilbert, Maria T. Zuber, Michael Bunce, Regin Rønn, David Gilichinsky, Duane Froese, and Eske Willerslev. 90 Ancient bacteria show evidence of DNA repair. PNAS September 4, 2007 104 (36) 14401-14405; <https://doi.org/10.1073/pnas.0706787104> Communicated by P. Buford Price, University of California, Berkeley, CA, July 25, 2007 (received for review June 14, 2007)

<sup>91</sup> Sahih Al Bukhari , Book 59, Hadith 89.<http://sunnah.com/bukhari/59/89>

<sup>92</sup> Sunan Ibn Majah, Book 33, Hadith 67. <http://sunnah.com/ibnmajah/33/67>

So the devils dislike the sunrays, but not all the jinn.

Miyamoto M, Yamaguchi Y, Sasatsu M, (2000) reported: "The disinfectant effects on Legionella and nontuberculous mycobacteria of hot water, ultraviolet light, silver ions and chlorine, were evaluated. The bacterial strains Legionella pneumophila ATCC33152 and Mycobacterium avium ATCC25291 and strains of L. pneumophila and M. avium which had been isolated from a 24 h bath, were examined for their resistance to treatments. All strains were killed within 3 min on exposure to hot water at 70 degrees C and exposure to ultraviolet light at 90 mW.s/cm<sup>2</sup>. The strains of L. pneumophila tested were killed within 6 h on exposure to a solution of silver ions at 50 micrograms/l. The number of viable cells of strains of M. avium fell from 10(5) CFU/ml to 10(3) CFU/ml after exposure to an aqueous solution of silver ions at 100 micrograms/l for 24 h".<sup>94</sup>

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<sup>93</sup> Sahih al jami, al suti 6823... al albani in the silsila sahiha 838

<sup>94</sup> Miyamoto M, Yamaguchi Y, Sasatsu M, Disinfectant effects of hot water, ultraviolet light, silver ions and chlorine on strains of Legionella and nontuberculous mycobacteria. Microbios [2000, 101(398):7-13]

## 5.6. Their movements:

A quick search through Quran and Sunnah (by the will of Allah) will lead us to know that some of them might have high speed of motion:

Allah (the Glorified) says: Said an Ifrit of the Jinns: "I will bring it to thee before thou rise from thy Council: indeed I have full strength for the purpose, and may be trusted." ( Surah Al namil 27: verse 39)

So that jinn was able to cut the distance between Palestine and Yemen in few hours (2 way, forth and back). This distance equals to roughly 2000 km or more(one way). Therefore, this jinn was able run in a very high speed, which is 4000km/5-6hours.

Bacteria have been confirmed to be able to move quickly in accordance to their size.

J G Mitchell, L Pearson, S Dillon, and K Kantalis (1995) reported: ” Natural communities of marine bacteria, an isolate (FMB-Bf3) from one marine community, and *Escherichia coli* were examined by video microscopy for the magnitude and uniformity of their speed. Natural communities formed tight microswarms that showed higher speeds (mean 5 230 microm s<sup>-1</sup>) than did *E. coli* (15 microm s<sup>-1</sup>) or FMB-Bf3 (mean = 62 microm s<sup>-1</sup>). Outside the microswarms, the marine bacteria slowed to 45 microm s<sup>-1</sup>. Between turns, in mid run, and while travelling in straight lines, the natural-community bacteria accelerated up to 1,450 microm s<sup>-2</sup>,

while the cultured bacteria showed maximum accelerations of 70 and 166 microm s<sup>-2</sup> “.<sup>95</sup>

This research is not brought as evidence to prove that this bacterium is that demon which can move as fast as 500-800km/h. It is brought to show that they can move quickly. Also, till now in the researches, the collective speed of biofilms has not been observed widely.

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<sup>95</sup> J G Mitchell, L Pearson, S Dillon, and K Kantalis. Natural Assemblages of Marine Bacteria Exhibiting High-Speed Motility and Large Accelerations. APPLIED AND ENVIRONMENTAL MICROBIOLOGY, Dec. 1995, p. 4436–4440 Vol. 61, No. 12 (1995)

### **5.7. Some of their products from the Quran and the Sunnah of our beloved prophet (peace and blessings on him):**

Allah (the glorified) said: O you who believe! all kinds of alcoholic drinks, gambling, and Al-Ansab, and AlAzlam (arrows for seeking luck or decision) are an abomination of Satan's handiwork. So avoid that in order that you may be successful. (Surah Al maida 5: Verse 90)

In Arabic the word (ammal) means work. This word while reading this verse can have two meanings: the habit of satan, or the work (product) of satan.

Also, it is well known fact that fungi and bacteria are producing wines and other types of alcoholics.

Aline Lonvaud-Funel, Annick Joyeux (1994) noted that: “Strain *Leuconostoc oenos* 9204 was isolated and studied since it retained its ability to produce histamine after several transfers. In synthetic medium this strain produced large amounts of histamine especially in the poorest nutritional conditions (no glucose, no L-malic acid). These results clearly demonstrate that *Leuc. oenos* involved in wine-making might play a role in biogenic amine production. The vinification method might also influence the final amine concentration in wine”.<sup>96</sup>

(P.S. Furthermore, it is obvious that these creatures (organisms) are multicellular and have mixtures of fungal cells, viral cells, bacterial cells and other types of cells, they are all found together. So fungi, viruses and other cells could be different types of cells of their body.

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<sup>96</sup> Aline Lonvaud-Funel, Annick Joyeux. Histamine production by wine lactic acid bacteria: isolation of a histamine-producing strain of *Leuconostoc oenos*. *Journal of Applied Microbiology*. Volume 77, Issue 4, pages 401–407, October 1994

## 5.8. Some biofilms can feel:

it has been reported that jinn feel pain, As they will be tormented by hell fire in the other life.

**Allah the most great says:** And among us are Muslims [in submission to Allah ], and among us are the unjust. And whoever has become Muslim - those have sought out the right course.<sup>14</sup> But as for the unjust, they will be, for Hell, firewood.' <sup>15</sup>. ( Quran : chapter Aljinn 72, verses14-15)

In these verses Allah mentions that the jinns are believers and non-believers . Those who are non believers will be tormented by the fire of hell which means they have sensation of touch and pain.

[Siryporn A](#) et. al (2014) said: “*Pseudomonas aeruginosa* infects every type of host that has been examined by deploying multiple virulence factors. Previous studies of virulence regulation have largely focused on chemical cues, but *P. aeruginosa* may also respond to mechanical cues. Using a rapid imaging-based virulence assay, we demonstrate that *P. aeruginosa* activates virulence in response to attachment to a range of chemically distinct surfaces, suggesting that this bacterial species responds to mechanical properties of its substrates. Surface-activated virulence requires quorum sensing, but activating quorum sensing does not induce virulence without surface attachment. The activation of virulence by surfaces also requires the surface-exposed protein PilY1, which has a domain homologous to a eukaryotic mechanosensor. Specific mutation of the putative PilY1 mechanosensory domain is sufficient to induce virulence in non-surface-attached cells, suggesting that PilY1 mediates surface mechanotransduction. Triggering virulence only when cells are both at high density and attached to a surface—two host-



nonspecific cues—explains how *P. aeruginosa* precisely regulates virulence while maintaining broad host specificity.”<sup>97</sup>

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<sup>97</sup> [Siryaporn A, Kuchma SL, O'Toole GA, Gitai Z](#). Surface attachment induces *Pseudomonas aeruginosa* virulence. [Proc Natl Acad Sci U S A](#). 2014 Nov 25;111(47):16860-5. doi: 10.1073/pnas.1415712111. Epub 2014 Nov 10

## **Discussion:**

Well this review paper has not been written in any academic form for problem solving and conclusion reaching style. But, it has been written in a very plain and as possible as simple form and style. Although, this style is not consistent through-out the whole paper but at least it is so through most of it. This style has been implemented to make it easy for everyone to read it and understand it. Because, this paper is a mixture of Quranic and Prophetic saying which are obviously older style and the much more recent and modern advanced scientific research which would be difficult to understand unless specialized in either subject. Also, this style has been used to make easy for everyone to extract information as these are touching everyday matters of every human.

Moreover, the discussion and the conclusions at each point are simple and non-conclusive. This method has been implemented as there are many benefits at each point other than those that limited mind of the writer can reach. Therefore, the conclusions have been kept so simple so that reader can follow them and can extract other information. Even, with these straightforward results the budget for the laboratory research that should be undertaken to clarify these interpretation would be enormous.

On the other hand there are still few doubtful points that need clarification. The subsequent questions are those doubts. These questions would be dealt with and answered during the lines of this short discussion:

1. In this paper the infectious agents that is most talked about would be regarded as bacterial biofilms. Whereas, there are other organisms that are infectious other than bacteria. E.g. plasmodium, viruses, fungi and

etc. So, that means the conclusion regarding devil in this paper would seem premature.

The response would be as the succeeding:

- a. It has been proved that the biofilm contains several species
- + Sivan Elias and Ehud Banin (2012) have discussed: “Nevertheless, most biofilm studies examine mono-species cultures, whereas nearly all biofilm communities in nature comprise a variety of microorganisms. The species that constitute a mixed biofilm and the interactions between these microorganisms critically influence the development and shape of the community”.<sup>98</sup>
- + Tasneem U, Yasin N, Qasim M, et al (2018) say: ”Approximately 99% of micro-organisms on planet earth live in communities known as biofilms [2]. Biofilm forming organisms are quietly broad in nature containing number of known pathogenic fungi and bacteria [3]. Due to biofilm formation pathogenic bacteria are not only capable of causing infection but they are also capable to survive in diverse environmental condition.”<sup>99</sup>

These two researches and the other research within this review have shown that biofilms are an extracellular polymeric matrix embedded with different types of microbes.

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<sup>98</sup> Sivan Elias, Ehud Banin, Multi-species biofilms: living with friendly neighbors, *FEMS Microbiology Reviews*, Volume 36, Issue 5, September 2012, Pages 990–1004, <https://doi.org/10.1111/j.1574-6976.2012.00325.x>

<sup>99</sup> Tasneem U, Yasin N, Qasim M, et al. Biofilm producing bacteria: A serious threat to public health in developing countries. *J Food Sci Nutr*. 2018;1(2):25-31.

b. Viruses can form biofilms:

+ Thoulouze MI, Alcover A. (2011) have proposed: “ The recent finding that the human T-cell leukemia virus type 1 (HTLV-1) encases itself in a carbohydrate-rich adhesive extracellular 'cocoon', which enables its efficient and protected transfer between cells, unveiled a new infectious entity and a novel mechanism of viral transmission. These HTLV-1 structures are observed at the surface of T cells from HTLV-1-infected patients and are reminiscent of bacterial biofilms. The virus controls the synthesis of the matrix, which surrounds the virions and attaches them to the T cell surface. We propose that, similar to bacterial biofilms, viral biofilms could represent 'viral communities' with enhanced infectious capacity and improved spread compared with 'free' viral particles, and might constitute a key reservoir for chronic infections.”<sup>100</sup>

- Moreover, viruses Not only can form biofilm, but they are active members of the biofilms.
- + Alexandra T. Payne et al (2020) have concluded :“Our results suggest that viruses are relevant members of biofilm communities in freshwater environments throughout all stages of biofilm growth observed in this study. While community-level profiling of biofilm viruses still requires refinement, preliminary assessments suggest temporal changes in biofilm viral communities coupled to biofilm growth and maturation. This, in turn, suggests that viruses are active and participating members of biofilm communities, with the potential to influence community abundance, composition, and functionality with potential implications at the ecosystem level. “<sup>101</sup>

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<sup>100</sup> Thoulouze MI, Alcover A. Can viruses form biofilms? Trends Microbiol. 2011 Jun;19(6):257-62. doi: 10.1016/j.tim.2011.03.002. Epub 2011 Mar 31.

<sup>101</sup> Alexandra T.Payne, Abigail J.Davidson, JinjunKan, MarcPeipoch, RavenBier, KurtWilliamson Widespread cryptic viral infections in lotic biofilms. Biofilm, Volume 2, December 2020, 100016. <https://doi.org/10.1016/j.biofilm.2019.100016>

- Therefore one can assume that viruses can be active members of the biofilm communities. Besides, there are few researches that show that viruses and bacteria can be partners most of the times of infection.eg. Neu U, Mainou BA. (2020) writers have said: “Microbes and microbial products can directly interact with viral particles. Our understanding of how the microbiota impacts virus infection is largely limited to the bacterial component of the microbiota. Although bacteria do not support eukaryotic virus infection, they can promote viral fitness by enhancing virion stability, promoting infection of eukaryotic cells, and increasing coinfection rates. Virus binding of bacteria can also impact bacterial biology, including bacterial adherence to eukaryotic cells. These interactions can also indirectly affect the host response to viral infection.”
- Direct and indirect impact of biofilms on viral infection has been recorded and the opposite also.

c. Fungi can also form biofilms:

+Fanning S, Mitchell AP (2012) have said:” Biofilms are a principal form of microbial growth and are critical to development of clinical infection. They are responsible for a broad spectrum of microbial infections in the human host. Many medically important fungi produce biofilms, including *Candida*, *Aspergillus*, *Cryptococcus*, *Trichosporon*, *Coccidioides*, and *Pneumocystis*. In this review we emphasize common features among fungal biofilms, and point toward genes and pathways that may have conserved roles.”<sup>102</sup>

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<sup>102</sup> Fanning S, Mitchell AP (2012) Fungal Biofilms. PLoS Pathog 8(4): e1002585.  
<https://doi.org/10.1371/journal.ppat.1002585>

- Furthermore, direct bacterial and fungal relations and interaction have been recorded.

+ Aurélie Deveau. et. al (2018) have explained: “Fungi and bacteria are found living together in a wide variety of environments. Their interactions are significant drivers of many ecosystem functions and are important for the health of plants and animals. A large number of fungal and bacterial families engage in complex interactions that lead to critical behavioural shifts of the microorganisms ranging from mutualism to antagonism. The importance of bacterial–fungal interactions (BFI) in environmental science, medicine and biotechnology has led to the emergence of a dynamic and multidisciplinary research field that combines highly diverse approaches including molecular biology, genomics, geochemistry, chemical and microbial ecology, biophysics and ecological modelling. In this review, we discuss recent advances that underscore the roles of BFI across relevant habitats and ecosystems “.<sup>103</sup>

- d. As for parasites few experiments have been undertaken to analyze and detect the relationship between parasites and bacteria.

+ Romoli, O., Gendrin, M (2018) have elaborated: “In the past 20 years, the pivotal role of the mosquito microbiota in shaping *Plasmodium* infection and transmission has gradually emerged. However, the tripartite interaction between the mosquito, its microbiota and the parasite is a complex relationship that still needs further investigation. In general, the microbiota was found to

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<sup>103</sup> Aurélie Deveau, Gregory Bonito, Jessie Uehling, Mathieu Paoletti, Matthias Becker, Saskia Bindschedler, Stéphane Hacquard, Vincent Hervé, Jessy Labbé, Olga A Lastovetsky, Sophie Mieszkina, Larry J Millet, Balázs Vajna, Pilar Junier, Paola Bonfante, Bastiaan P Krom, Stefan Olsson, Jan Dirk van Elsas, Lukas Y Wick, Bacterial–fungal interactions: ecology, mechanisms and challenges, *FEMS Microbiology Reviews*, Volume 42, Issue 3, May 2018, Pages 335–352, <https://doi.org/10.1093/femsre/fuy008>

reduce *Plasmodium* infection and to impact several physiological aspects of the mosquito, notably affecting its lifespan. Surprisingly, these effects induced by the microbiota were consistent almost irrespective of the *Anopheles* and *Plasmodium* species, suggesting that this tripartite interaction is a stable system in which each component plays a role.”<sup>104</sup>

These above studies indicate that most of the infectious species are multicellular, dispersed in extracellular matrices and have some kind of relation with other species inside the biofilm. This in in turn is a very strong indicative clue for the specialization of different cells within one biofilm.

## 2. What are the proofs regarding multicellularity as one functional unit and not as communities?

For the reply of this point

- There are extensive evidences from the Holy Quran and the prophetic sayings that are suggestive of cells differentiation and specialization. For example:

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<sup>104</sup> Romoli, O., Gendrin, M. The tripartite interactions between the mosquito, its microbiota and *Plasmodium*. *Parasites Vectors* **11**, 200 (2018). <https://doi.org/10.1186/s13071-018-2784-x>

- a. Allah the Lord of all being (exalted) says:** And We have certainly created for Hell many of the jinn and mankind. They have hearts with which they do not understand, they have eyes with which they do not see, and they have ears with which they do not hear. Those are like livestock; rather, they are more astray. It is they who are the heedless. (chapter 7 Al aaraf, verse 79)

In this verse our Lord Allah mentions that jinn (satan) have eyes and ears.

- b.** The earlier Sayings of the prophet Mohammed (peace be up on him) that have been viewed regarding the devil to have tongue and hands. These signs are also strong clues for cell differentiation and specialization within the jinn.

Likewise the evidences are overwhelming regarding this typical point in laboratory studies and experiments. E.g:

C. Jordi van Gestel et al 2015 have reported : “The dense aggregation of cells on a surface, as seen in biofilms, inevitably results in both environmental and cellular heterogeneity. For example, nutrient gradients can trigger cells to differentiate into various phenotypic states. Not only do cells adapt physiologically to the local environmental conditions, but they also differentiate into cell types that interact with each other. This allows for task differentiation and, hence, the division of labor. In this article, we focus on cell differentiation and the division of labor in three bacterial species: *Myxococcus xanthus*, *Bacillus subtilis*, and *Pseudomonas aeruginosa*. During biofilm formation each of these species differentiates into distinct cell types, in some cases leading to cooperative interactions. The division of labor and the



cooperative interactions between cell types are assumed to yield an emergent ecological benefit.”<sup>105</sup>

### 3. What is the response regarding their intelligence?

Well there are irresistible inclinations toward the idea that these creatures are extremely rational and bright.

The clues and indications are as follows:

- a. The verses of the Holy Quran where the satan makes wrong reasoning and judgment when he refuses to prostrate or bow before Adam (peace be on him) because he thinks that he has been created from better material than that which the human being has been created from.

**Allah the great says:** [ Allah ] said, O iblees, what is [the matter] with you that you are not with those who prostrate?" 32. He said, "Never would I prostrate to a human whom You created out of clay from an altered black mud." 33. ( Quran chapter 15 Al Hjr, verses 32-33)

- b. Other verses and saying that show that satans have complicated organ which in turn denote that these organs are controlled by a higher or complex neurological system and the appendages of that system.
- c. Modern equipment have allowed humans to elicit new exciting features of these biofilms. One of those features of biofilms is that there long ranged electrical signaling within the biofilm, which might be indicative of neuron like action of some tissues.

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<sup>105</sup> Jordi van Gestel, Hera Vlamakis, Roberto Kolter Division of Labor in Biofilms: the Ecology of Cell

Differentiation. microbiolspec April 2015 vol. 3 no. 2 doi:10.1128/microbiolspec.MB-0002-2014

- Humphries J, Xiong L, Liu J, et al. (2017) have found: “Bacteria residing within biofilm communities can coordinate their behavior through cell-to-cell signaling. However, it remains unclear if these signals can also influence the behavior of distant cells that are not part of the community. Using a microfluidic approach, we find that potassium ion channel-mediated electrical signaling generated by a *Bacillus subtilis* biofilm can attract distant cells. Integration of experiments and mathematical modeling indicates that extracellular potassium emitted from the biofilm alters the membrane potential of distant cells, thereby directing their motility. This electrically-mediated attraction appears to be a generic mechanism that enables cross-species interactions, as *Pseudomonas aeruginosa* cells also become attracted to the electrical signal released by the *B. subtilis* biofilm.”<sup>106</sup>

This research is a clear indication of long range electrical signaling.

- Westerhoff et al (2014) have summarized: “Living organisms persist by virtue of complex interactions among many components organized into dynamic, environment-responsive networks that span multiple scales and dimensions. Biological networks constitute a type of information and communication technology (ICT): they receive information from the outside and inside of cells, integrate and interpret this information, and then activate a response. Biological networks enable molecules within cells, and even cells themselves, to communicate with each other and their environment. We have become accustomed to associating brain activity – particularly

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<sup>106</sup> Humphries J, Xiong L, Liu J, et al. Species-Independent Attraction to Biofilms through Electrical Signaling. *Cell*. 2017;168(1-2):200–209.e12. doi:10.1016/j.cell.2016.12.014

activity of the human brain – with a phenomenon we call “intelligence.” Yet, four billion years of evolution could have selected networks with topologies and dynamics that confer traits analogous to this intelligence, even though they were outside the intercellular networks of the brain. Here, we explore how macromolecular networks in microbes confer intelligent characteristics, such as memory, anticipation, adaptation and reflection and we review current understanding of how network organization reflects the type of intelligence required for the environments in which they were selected. We propose that, if we were to leave terms such as “human” and “brain” out of the defining features of “intelligence,” all forms of life – from microbes to humans – exhibit some or all characteristics consistent with “intelligence.”<sup>107</sup>

4. Through-out the whole of this review, different features of jinn have been displayed and compared to their counterparts from biofilms. However, those attributes for the biofilms are true or can be seen only in few strains?

Well, it has been proven that cells within the biofilms are differentiated into different cell types and probably these cells are in turn grouped into different types of organs. Therefore, not all strains or species have the abilities to perform the same task.

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<sup>107</sup> Westerhoff, Hans & Brooks, Aaron & Simeonidis, Vangelis & García-Contreras, Rodolfo & He, Fei & Boogerd, Fred & Jackson, Victoria & Goncharuk, Valeri & Kolodkin, Alexey. (2014). Macromolecular networks and intelligence in microorganisms. *Frontiers in Microbiology*. 5. 379. 10.3389/fmicb.2014.00379.

Moreover, it has been obvious within this paper that these jinn are of different types. This consecutively means that these creatures have different organs according to their specialization and place of living. Furthermore, they also can be divided by their size and their potency in satan, demons and etc.....which means that vast range of cells arrangements and organization would be present.

Therefore, it is clear that most evidences point out that most of the attributes that has been discussed for devil seem to be custom fit for the biofilms. These features have been found by very sophisticated modern apparatus that are very expensive. Also, their behaviors have not been truly understood. On the other hand, much of their complex behaviors have been discussed 1400 years ago in the religion of Islam. It would have seemed less expensive and more scientific to ponder upon the verses of this religion and extract the benefits and knowledge from them.

**Much more argument will be presented in the conclusion.**

## **Conclusion:**

Within the pages of this review few characteristics of both creatures (the Jinn and bacteria) were presented and compared. The prophet of Islam (Mohammed peace and blessings on him) has said that Jinn can afflict diseases like plague. This would seem like a superstition to many people in this materialistic era when lots of human beings have lost faith in The Creator and have adopted the theory of evolution. This understanding of diseases being caused by jinn is further supported by the saying of the companion of the Messenger of Allah, Abdullah bin Masud's saying that satan puts his hands inside the eye of his wife to cause an infection. Although it is not the saying of the prophet (peace and blessings be on him) but the scholars of Hadith (prophetic sayings) categorize companion's sayings about the unseen as the prophet's ones.

Afterwards, some other features of both creatures were displayed and compared. It has been evident that bacteria are no more perceived as unicellular creatures. Since the eighties of the last century it has become popular to the scientific field workers and students that bacteria live in communities. These consumptions had strong clues to their validity such as Programmed cell death.

On one hand Jinn were found to live in places such as inside oceans and water, in the soil, in the atmosphere, in lavatories, on food left overs, inside the human being in different places and in the space outside the atmosphere. Moreover, Jinn can digest food in the chemical form of digestion (decompose). They also enter the mouth, the nostrils and stay in there and cause infections at a time. Besides, they have the ability to eat foods upon which the name of God has not been mentioned on and the Leftovers. Furthermore, they are found inside the human blood in the

non-infected state. Although, this concept is not acceptable in the medical field (as human blood is considered to be sterile), but it has been said by our prophet (peace and blessings up on him) fourteen centuries ago. Also, it is the clear evident understanding of the saying.

Additionally, jinn can speak in a whispering form to the human being. Besides, they can communicate to one another by talking to each other. This means that they would produce sound waves in this condition. Also, they first existed before mankind as it has been proved in the verses from the Holy Quran. Further, they have been associated with abnormal uterine bleeding. Besides, the sun light must have a harmful effect on most of them as they spread in the night. Finally, they might be linked to the production of the intoxicative material(s) of alcohols.

On the other hand, Biofilms were found to have similar features to those of devil or jinn. Also, the similarities are very strong clues to prove that they are the same creature. However, lots of scientists and lots of Muslim would refuse this idea. They would ask for a hundred percent match between these two creatures as their ancestors did with the prophets. They asked for miracles and when miracles happened they had come with other pointless arguments. If we put together all the features of these two creatures and compare them together, then the odds of these two having these shared features to be by chance is nearly impossible. Adding to that all the fact that the era when our beloved prophet Mohammed (peace and blessings on him) was sent, was a non- prosperous time where science and machines had not been so advanced.

Plus, the fact that Our Lord had mentioned in the Holy Quran that jinn are Humans' open enemy; Allah says: O mankind! Eat of that which is lawful and good on the earth, and follow not the footsteps of Shaitân (Satan).

Verily, he is to you an open enemy. (Surah Albaqarah 2, verse 168). Then, If anyone ponders on the acts which bacteria can do then one realizes that they are our enemies. They are destroying our foods, our bodily organs, eating our foods, making mutations into our unborn children, destroying human's life (killing), they are as intelligent as being able to produce antibodies to antibiotics and other activities which interfere with human activities directly reaches the point that they are an open enemy for humankind. Also, they are raging mass killings (epidemics) of humankind.

To sum up, from what has been said it is obvious that most of the features of jinn are shared by the bacteria. This cannot be a coincidence especially if someone knows that fourteen centuries ago was a non-flourishing age of science. Also, the odds that the similarities mentioned between those two kinds are by chance are minute or even unmentionable. However, some technical problems are present in the point of view of the doubters. Firstly; their names are different. This is solved by reading the Holy Quran where Allah the superior tells us the story of other nations that changed the names of the worshiped idols to puzzle and deceive the common people. Allah the most superior says: You do not worship besides Him but only names which you have named (forged), you and your fathers, for which Allah has sent down no authority. The command is for none but Allah. He has commanded that you worship none but Him, that is the straight religion, but most men know not. (Suarh Yusuf (12), verse 40)

Secondly; till yet it has not been proved that bacteria are multicellular organism i.e the biofilm is one or two or few organism but not millions or even the biofilm is an organ?

The answer would be that in the discussion arguments were made regarding their ingenuity and adaptation. Also, discussions were made regarding how other species like viruses, parasites and fungi are also forming biofilms and are part of the bacterial biofilm. Furthermore, one can conclude that biofilms (jinn) have the following features:

1. They are multicellular organisms working as one of few functional units. Their shapes are vague.
2. They have sensory organs for tasting, hearing and vision. This is concluded from our Lord's saying: And surely, We have created many of the jinn and mankind for Hell. They have hearts wherewith they understand not, and they have eyes wherewith they see not, and they have ears wherewith they hear not (the truth). They are like cattle, nay even more astray; those! They are the heedless ones. (Al aaraf (7), verse 179)
3. Furthermore, Jinn (biofilms) can reproduce multicellularly, this is evident in the Quran in our Lord's saying: And when We said to the angels; "Prostrate yourselves unto Adam." So they prostrated themselves except Iblîs (Satan). He was one of the jinn; he disobeyed the Command of his Lord. Will you then take him and his offspring as protectors and helpers rather than Me while they are enemies to you? What an evil is the exchange for the wrong-doers. (Al kahf 18, verse 50)

From this one can assume that they reproduce multicellularly and have sexual desires.

4. Therefore, they surely (Allah knows best) possess hormone like substances.



5. They have a circulatory system with a heart like organ. Our Lord the supreme says: , We have created many of the jinn and mankind for Hell. They have hearts wherewith they understand not, (Al aaraf (7), verse 179)
6. As, for viruses the writer has concluded that they are part of the external surface of the jinn (biofilms). This has been done by comparing hairs of humans and the saying of the prophet Mohammed (peace and blessings on him): the horns of a satan. Narrated by bukhari and muslim. (Sahih Muslim 2905 d, : Book 54, Hadith 61)

In the author's conclusion, Biofilms are jinn but humans were hideous about this fact because of abandoning true religion. The fact that they share a lot of features and similarities that are discovered by very sophisticated instruments and laboratory machines makes the alarm ring bells that there is a mistake in interpreting them as unicellular organisms. Thus The Quran has overcome modern sophisticated scientific equipment in an unprecedented way.

All Thanks be to my GOD and LORD: ALLAH

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